

SPSS Workshop

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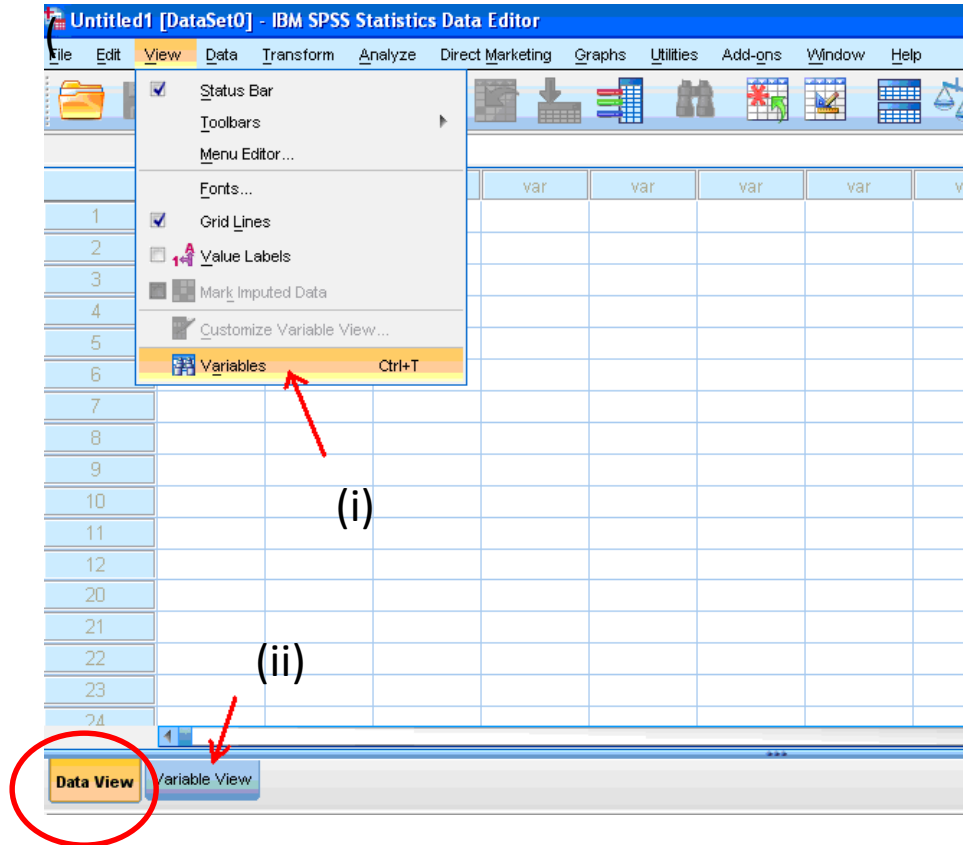
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1. SPSS Menu

SPSS is menu driven and has a variety of pull-down menu available for the user. The main menu bar in the Data Editor contains ten menus as follows:



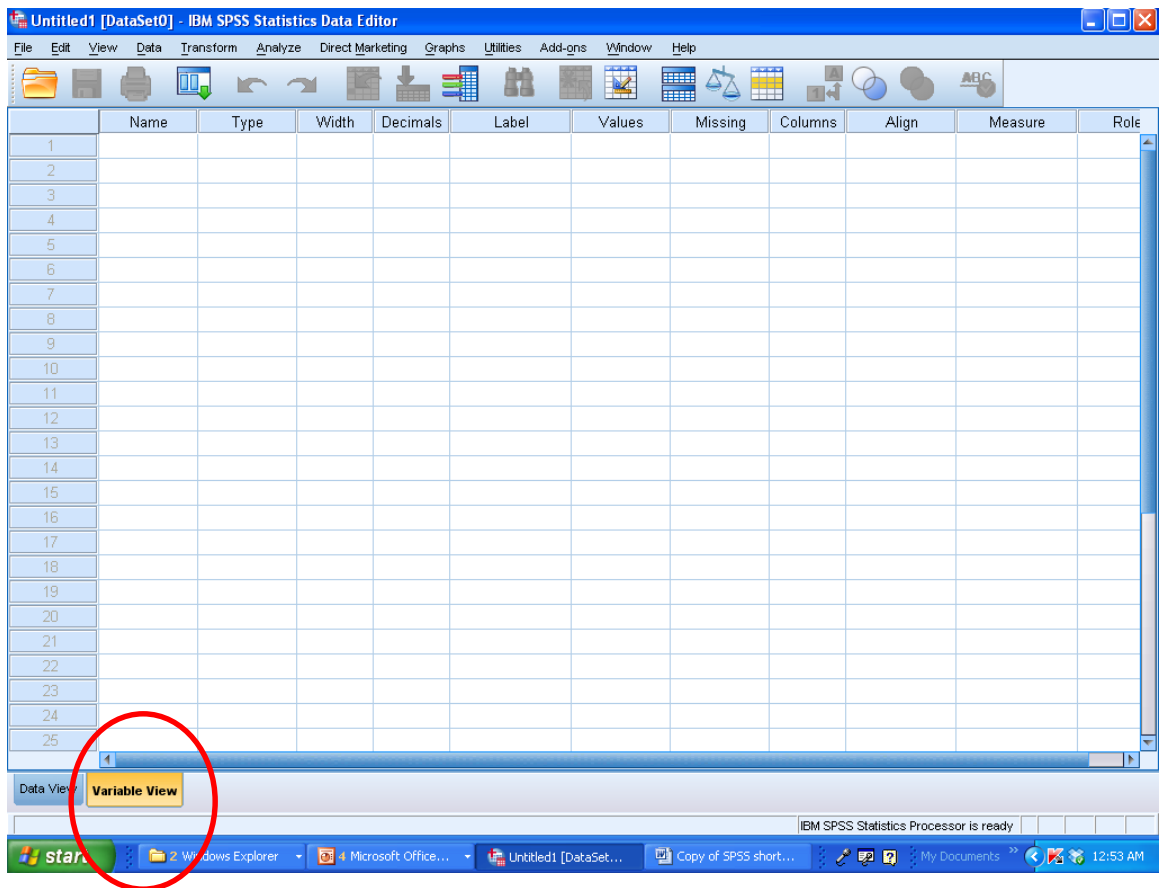
Go to Variable View by

(i) Select the “View” menu and then “Variable”

Or

(ii) Press “Variable View” tab at the bottom tool bar

Once you enter the Variable View, a screen similar to the following table will appear.



2. Defining Variables

Variable Names must comply with certain rules:

- Must begin with a letter. The remaining characters can be a letter, any digit, a full stop or symbols @, #, _ or \$
- Cannot end with a full stop or underscore
- Blanks and special characters cannot be used (e.g. !, ?, ', *)
- Names are not case sensitive

Variable type

By default, SPSS assumes that all new variables are numeric with 2 decimal places. However, it is possible to select other variable type (such as date, currency, string) and vary the number of decimal places

Label

The Label is the full description of the variable name and is an optional means of improving the interpretability of the output.

Value

It is possible to use alphanumeric codes or numeric codes for the variables

Column format

It is possible to adjust the width of the Data Editor column or change the alignment of data in the column (left, center or right).

Missing value

When dealing with missing data, you may leave the cell blank or assign missing value codes. If you choose the latter, then a number of rules apply:

- Missing value codes must be of the same data type as the data they represent
- Missing value codes cannot occur as data in the data set
- By convention, the choice of digit is usually 9

Measurement level

You can specify the level of measurement as scale (interval or ratio), ordinal or nominal

Please refer the following example and data for the rest of the demonstration up to Example1.

示例 1 (Example 1)

Q1. 你平均每次花上多少錢於超級市場購物上?

How much do you spend per visit of supermarket?

[1] < \$100 [2] \$100 - \$500 [3] \$501 - \$1000 [4] > \$1000

Q2. 請評價以下各項的重要性。(每項敘述只可圈出一個數字)

Please rate how important the following values are to you.

(Please circle one number for each statement)

	Strongly Disagree					Strongly Agree	
1. 優質服務 Good customer service	1	2	3	4	5	6	7
2. 食物新鮮 Food is fresh	1	2	3	4	5	6	7

Q3. 性別 Gender:

[1] 男 (Male) [2] 女 (Female)

Q4. 個人每月收入Average Monthly Personal Income (\$HKD):

[1] < \$10,000 [2] \$10,000 - \$20,000 [3] > \$20,000

Name	Label	Value
q1	Spending/visit	1 = Less than \$100 2 = \$100-\$500 3 = \$501-\$1000 4 = Above \$1000
q2.1	Customer Service	
q2.2	Fresh Food	
q3	Gender	1 = Male 2 = Female
q4	Income	1 = <\$10000 2 = \$10000-\$20000 3 = >\$20000

Q1	q2.1	q2.2	q3	q4
1	4	5	1	1
1	5	5	2	2
3	7	6	2	2
2	5	5	1	2
2	4	6	1	1
2	6	6	2	2
2	5	6	2	1
3	6	7	1	3
1	4	6	1	2
4	7	7	2	3

To Define a variable:

1. Work in the Variable View, in the first blank cell of **Name** column, type the first variable name (i.e. q1), and press Enter
2. In the first blank cell of the **Label** column, type the label for the variable (i.e. Spending per visit)
3. Click the first blank cell of the **Values** column, and then click on the  button on the right to open the **Value Labels** box. In the **Value:** box, type the first value code for the variable (i.e. 1) then tab. In the **Value Label:** box, type the label for this value (i.e. Less than \$100)
4. Click on **Add**. You will notice that the value and its label have moved into the box below.
5. Repeat this process for

2 = \$100-\$500
 3 = \$501-\$1000
 4 = Above \$1000
6. Click on **OK**. You will notice that there is now information in the cell.

Repeat the above procedures for the other variables q3, q4. For q2.1 and q2.2, step 3 to 6 could be skipped as they are interval scaled and do not have categories as answers.

The screenshot shows the SPSS Variable View window. The variable list includes q1, q2.1, q2.2, q3, q4, BA_TV_Q3, and BA_FB_Q3. The Value Labels dialog box is open, showing the mapping of numeric values to text labels for variable q1.

Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure
q1	Numeric	8	0	Q1 Spending per visit	{1, Less than \$100}...	None	8	Right	Nominal
q2.1	Numeric	8	0	Q2.1 Serv - Customer service	{1, Strongly Disagree}...	None	8	Right	Scale
q2.2	Numeric	8	0	Q2.2 Qty - Fresh food	{1, Strongly Disagree}...	None	8	Right	Scale
q3	Numeric	8	0	Q3 Gender	{1, male}...	None	8	Right	Nominal
q4	Numeric	8	0	Q4 Income	{1, <10000}...	None	8	Right	Nominal
BA_TV_Q3	Numeric	8	0	BA_TV_Q3_ The advertisement	{1, Strongly Disagree}...	None	8	Right	Scale
BA_FB_Q3	Numeric	8	0	BA_FB_Q3_ The advertisement	{1, Strongly Disagree}...	None	8	Right	Scale

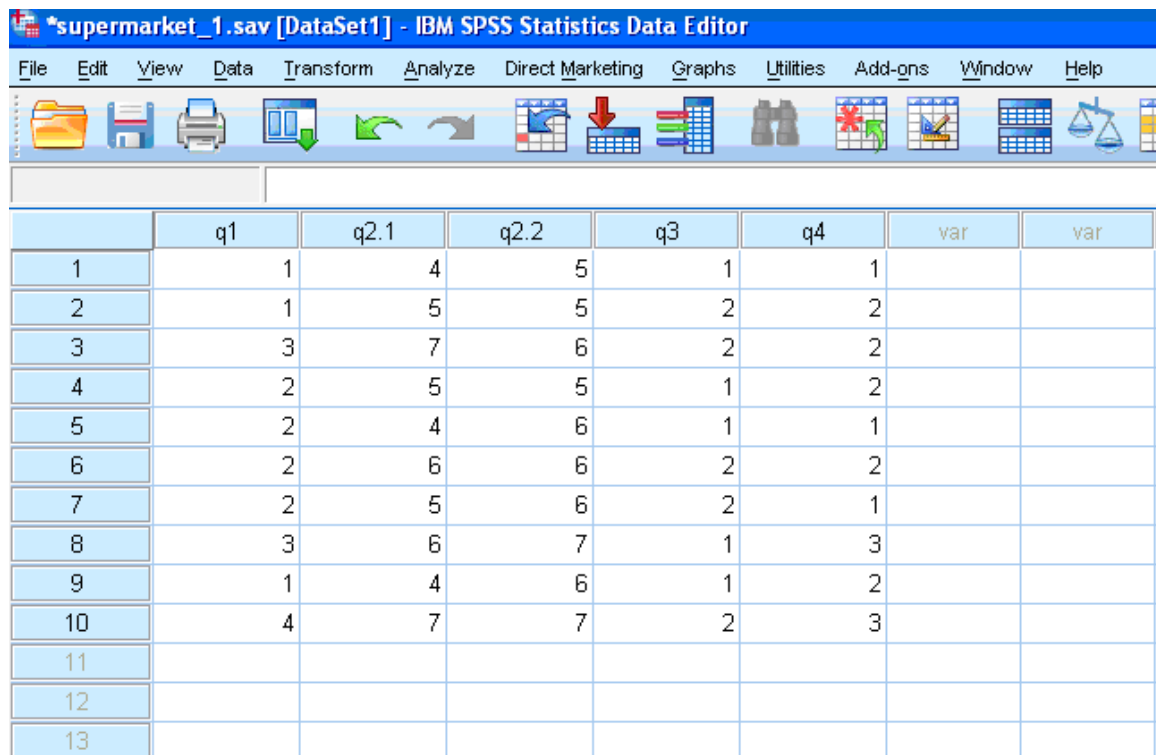
Value	Label
1	"Less than \$100"
2	"\$101-\$500"
3	"\$501-\$1000"
4	"Above \$1000"

3. Entering Data

Go to Data View by (i) Select the “**View**” menu and then “**Data**”
or (ii) Press “**Data View**” tab at the bottom tool bar

Enter the following value into the corresponding cells

q1	q2.1	q2.2	q3	q4
1	4	5	1	1
1	5	5	2	2
3	7	6	2	2
2	5	5	1	2
2	4	6	1	1
2	6	6	2	2
2	5	6	2	1
3	6	7	1	3
1	4	6	1	2
4	7	7	2	3



	q1	q2.1	q2.2	q3	q4	var	var
1	1	4	5	1	1		
2	1	5	5	2	2		
3	3	7	6	2	2		
4	2	5	5	1	2		
5	2	4	6	1	1		
6	2	6	6	2	2		
7	2	5	6	2	1		
8	3	6	7	1	3		
9	1	4	6	1	2		
10	4	7	7	2	3		
11							
12							
13							

File Save As **File Name** : supermarket.

4.Inserting and deleting cases and variables

To insert a new case between existing cases

1. Select any cell in the case (row) below the position where you want to insert the new case.
2. Select the **Data** menu and click on **Insert Case** or click on the **Insert Case** tool. A new case (row) will be inserted.

To insert a new variable between existing variables

1. Select any cell in the variable (column) to the right of the position where you want to insert a new variable.
2. Select the **Data** menu and click on **Insert Variable** or click on the **Insert Variable** tool. A new variable (column) will be inserted.

To delete a case (row)

1. Click on the case number on the left side of the row. If you wish to delete the entire case.
2. Select the **Edit** menu and click on **Clear**. Alternatively, you can use the Delete button on the keyboard.

To delete a variable (column)

1. Click on the variable name at the top of the column if you wish to delete the entire variable.
2. Select the **Edit** menu and click on **Clear**. Again, you can use the Delete button.

5.Moving Variables

To move a variable

1. For the variable you want to move, click the variable name at the top of the column in the **Data View** or the row number in the **Variable View**. The entire variable is highlighted.
2. Drag the highlighted column in the **Data View** or the highlighted row number in the **Variable View** to the desired position.

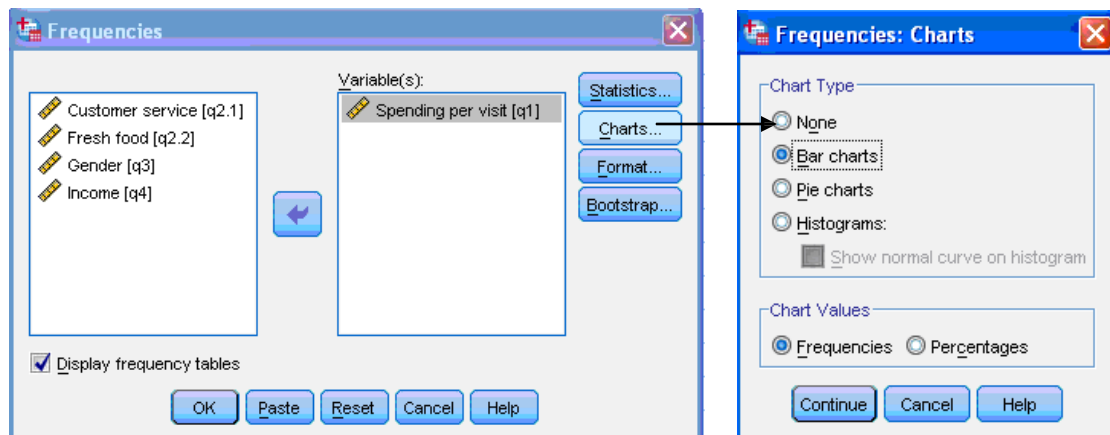
6 Descriptive Statistics

6.1 Nominal and Ordinal Variable

For nominal and ordinal variable, frequency tables and charts are used to display central tendency and variability.

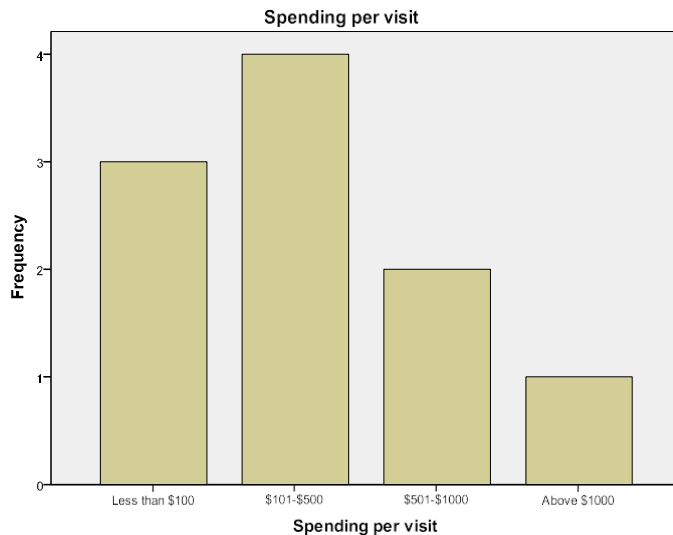
Data File: Supermarket

1. Select the **Analyze** menu.
2. Click on **Descriptive Statistics** and then on **Frequencies...** to open the **Frequencies** dialogue box.
3. Select the variable(s) you require (i.e. q1) and click on the  button to move the variable into the **Variable(s):** box.
4. Click on the **Charts...** command pushbutton to open the **Frequencies: Charts** sub-dialogue box.
5. Click on the **Bar char(s)** radio button.
6. Click on **Continue** and then **OK**.



Output:

Spending per visit					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$100	3	30.0	30.0	30.0
	\$100-\$500	4	40.0	40.0	70.0
	\$501-\$1000	2	20.0	20.0	90.0
	Above \$1000	1	10.0	10.0	100.0
	Total	10	100.0	100.0	

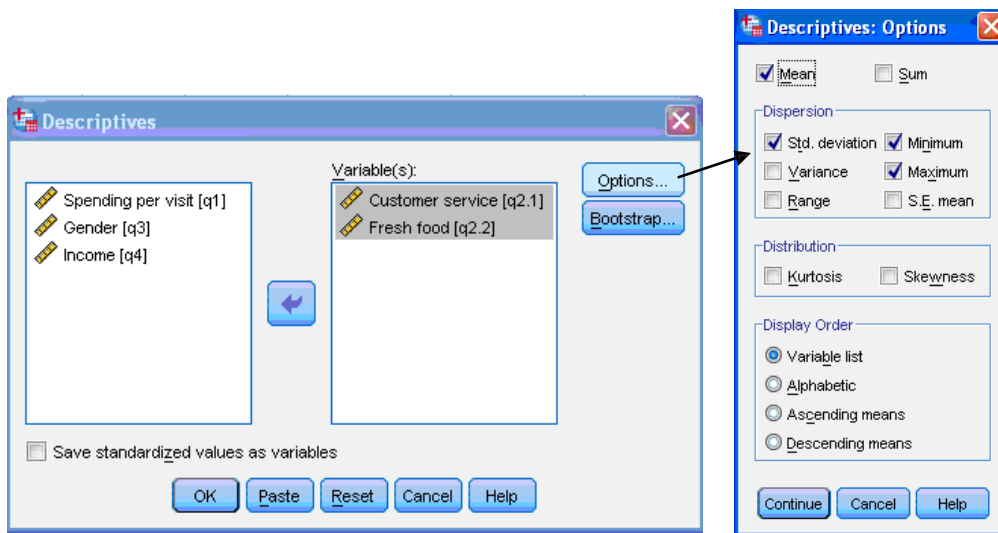


6.2 Interval and Ratio Variable

For interval and ratio variables, mean and standard deviation are used to measure central tendency and variability.

Data File: Supermarket

1. Select the **Analyze** menu.
2. Click on **Descriptive Statistics** and then on **Descriptives...** to open the **Descriptives** dialogue box.
3. Select the variable(s) you require (i.e. q2.1 and q2.2) and click on  the button to move the variable(s) into the **Variable(s):** box.
4. Click on the **Options...** command pushbutton to open the **Descriptives: Options** sub-dialogue box.
5. Ensure **Mean** check box is selected.
6. In the **Dispersion** box, select **Std deviation**, **Minimum** and **Maximum** check boxes.
7. Click on **Continue** and then **OK**.



Output:

Descriptive Statistics

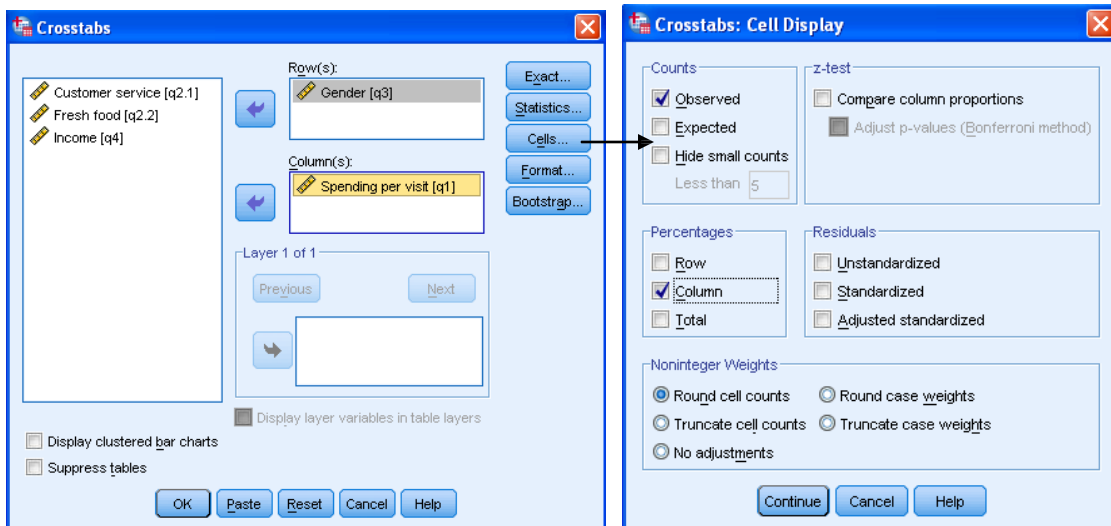
	N	Minimum	Maximum	Mean	Std. Deviation
Customer service	10	4	7	5.30	1.160
Fresh food	10	5	7	5.90	.738
Valid N (listwise)	10				

6.3 Cross-tabulation

Data File: Supermarket

Display a cross-tabulation table for Spending per visit (q1) by Gender (q3), column percentage

1. Select the **Analyze** menu
2. Click on **Descriptive Statistics** and then on **Crosstabs...** to open the **Crosstabs** dialogue box.
3. Select a row variable (i.e. q3 Gender) and click on the  button to move the variable into the **Row(s)** box.
4. Select a column variable (i.e. q1 Spending per visit) and click on the  button to move the variable into the **Column(s)** box.
5. Click on the **Cells...** command pushbutton to open the **Crosstabs: Cell Display** sub-dialogue box.
6. In the **Counts** box, click on the **Observed** check box.
7. In the **Percentages** box, click on the **Column** check box.
8. Click on **Continue** and then **OK**.



Output:

Q3 Gender * Q1 Spending per visit Crosstabulation

			Q1 Spending per visit				Total
			Less than \$100	\$101-\$500	\$501-\$1000	Above \$1000	
Q3 Gender	male	Count	2	2	1	0	5
		% within Q1 Spending per visit	66.7%	50.0%	50.0%	.0%	50.0%
	female	Count	1	2	1	1	5
		% within Q1 Spending per visit	33.3%	50.0%	50.0%	100.0%	50.0%
Total		Count	3	4	2	1	10
		% within Q1 Spending per visit	100.0%	100.0%	100.0%	100.0%	100.0%

7 Inferential Statistics

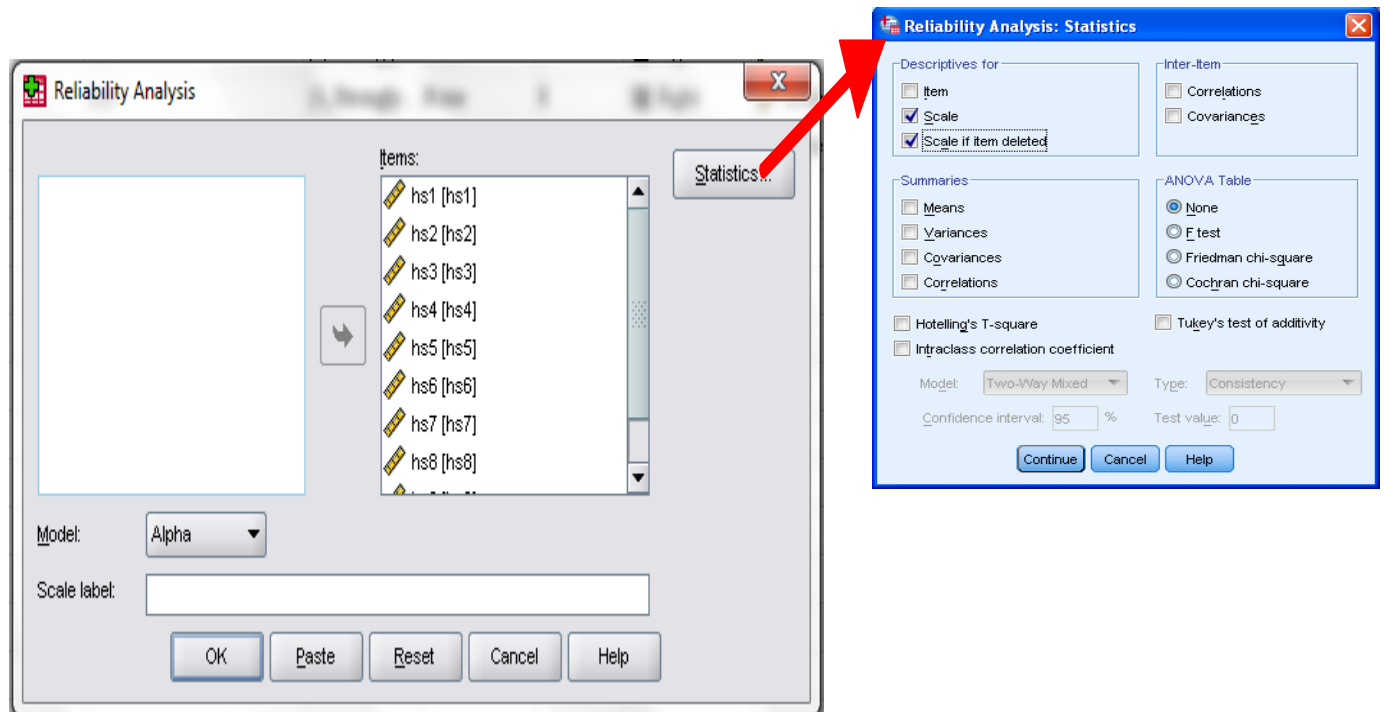
7.1 Reliability Analysis

Reliability analysis is used to test the internal consistency of the questions related to their constructs. Cronbach's alpha is the indicator of the reliability of the measuring items. It ranges from 0 to 1. An indicator of acceptable internal consistency is that Cronbach's Alpha should be at least 0.7. If the Alpha is less than 0.7, question(s) should be deleted in order to maintain the consistency of measurement.

Data File: Reliability test

Procedure:

1. Select the **Analyze** menu.
2. Click on **Scale** and then **Reliability Analysis...** to open the **Reliability Analysis** dialogue box.
3. Select the variables (hs1 - hs10) and click on the  button to move the variables into the **Items:** box.
4. Ensure that **Alpha** is displayed in the **Model:** dropdown list.
5. Click on the **Statistics...** command pushbutton to open the **Reliability Analysis: Statistics** sub-dialogue box.
6. In the **Descriptives for** box, select the **Scale** and **Scale if item deleted** check boxes.
7. Click on **Continue** and **OK**.



Output for Reliability Analysis:

Round 1

Reliability Statistics

Cronbach's Alpha	N of Items
.768	10

The reliability coefficient (alpha) of hs1- hs10 is 0.768.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
hs1	17.94	21.862	.648	.720
hs2	17.39	23.048	.345	.764
hs3	18.19	22.348	.693	.719
hs4	17.72	22.836	.379	.758
hs5	17.75	21.977	.646	.721
hs6	17.86	23.220	.425	.749
hs7	17.39	25.029	.246	.772
hs8	18.45	24.692	.415	.752
hs9	18.15	24.265	.526	.743
hs10	17.44	23.710	.253	.781

Cronbach's Alpha if Item Deleted gives the alpha coefficient that would result if the item were removed from the group. For example, if hs10 is removed from the set of variables and the reliability analysis is re-run, alpha coefficient of hs1 - hs9 will be increased to 0.781 which is higher than that of hs1 - hs10 (0.768).

Round 2

Reliability Statistics

Cronbach's Alpha	N of Items
.781	9

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
hs1	15.57	17.843	.676	.729
hs2	15.02	19.250	.324	.787
hs3	15.82	18.457	.697	.731
hs4	15.35	18.577	.413	.771
hs5	15.38	18.296	.621	.737
hs6	15.49	19.214	.428	.765
hs7	15.02	20.577	.287	.785
hs8	16.08	20.821	.379	.771
hs9	15.78	20.192	.532	.756



After removing hs10, the alpha of hs1 – hs9 has increased to 0.781. The above table shows that further improvement (0.787) could be made if hs2 is removed from the group. This process continues until alpha could not be improved even if some of the items are deleted. The final result is as follows.

Round 3

Reliability Statistics

Cronbach's Alpha	N of Items
.796	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
hs1	10.73	11.332	.702	.734
hs3	10.98	12.250	.637	.751
hs4	10.51	11.791	.438	.796
hs5	10.54	12.097	.568	.761
hs6	10.65	12.596	.415	.793
hs8	11.24	13.529	.451	.783
hs9	10.94	13.189	.576	.766

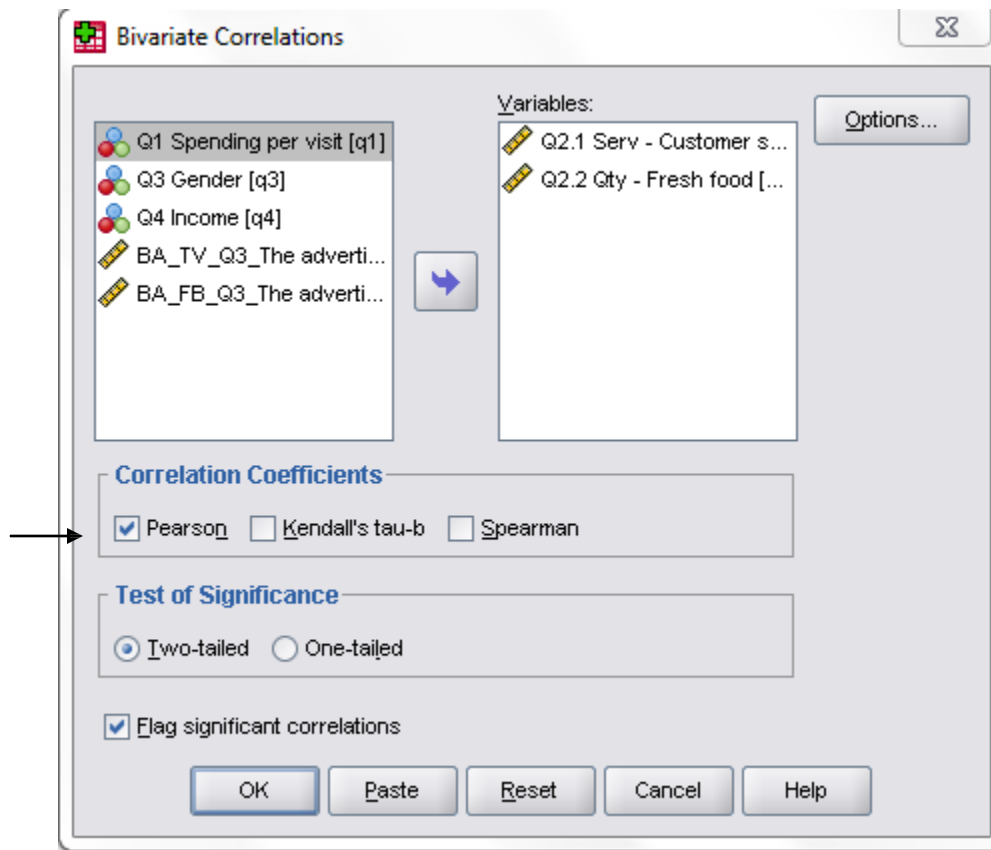
7.2 Correlation

The Pearson Correlation Coefficient will determine if there is evidence of a linear relationship between two interval or ratio variables. You could say that the aim of the correlation test is similar to that of the chi-square test, except that the chi-square test is used for nominal or ordinal data and the correlation test is for interval or ratio data.

Example: Use Pearson Correlation Coefficient to determine whether there is any relationship between q2.1 Customer Service (Interval) and q2.2 Fresh Food (Interval).

Data File: Supermarket

1. Select the **Analyze** menu.
2. Click on **Correlate** and then **Bivariate...** to open the **Bivariate Correlations** dialogue box.
3. Select the attribute variables (i.e. q2.1 Customer Service and q2.2 Fresh Food) and click on the  button to move the variables into the **Variables:** box.
4. Ensure that the **Pearson** correlation option has been selected.
5. Click on **OK**.



Output:

Correlations		Customer service	Fresh food
Customer service	Pearson Correlation	1	.558
	Sig. (2-tailed)	.	.093
	N	10	10
Fresh food	Pearson Correlation	.558	1
	Sig. (2-tailed)	.093	.
	N	10	10



In each cell, there are 3 numbers. The top number is the Pearson Correlation Coefficient (r), the second number is the Significance Value, and the third number N is the number of respondents. The First thing you should look at is the significance value, as we need to first establish if $\text{Sig.} < 0.05$ indicating that a relationship indeed exists before we start to discuss the nature and strength of the relationship.

From the above table, we can see that $\text{Sig.} = 0.093 > 0.05$ for the Correlation test between Customer service and Fresh food. This indicates that there is no relationship between these 2 attributes. However, if $\text{Sig.} < 0.05$, then we have to look at the r value to interpret their relationships. R ranges from -1 to 1 . When r is close to 1 , this indicates very strong positive relationship. When r is close to -1 , this indicates very strong negative relationship. When r is close to 0 , this indicates very weak relationship. When r is equal to 0 , this implies no relationship exists between the 2 variables. In marketing, $r = 0.6$ or greater is a moderately strong positive relationship, while $0 < r < 0.4$ would be interpreted as a relatively weak positive relationship.

7.3 Regression Analysis

Regression analysis is a statistical tool or technique that investigates the linear relationship among the variables.

Example

Data File: Strawberries (Regression)

The data file contains the following variables:

strawberries – sales of strawberries in a particular region

sunshine – the number of hours of sunshine in the growing season

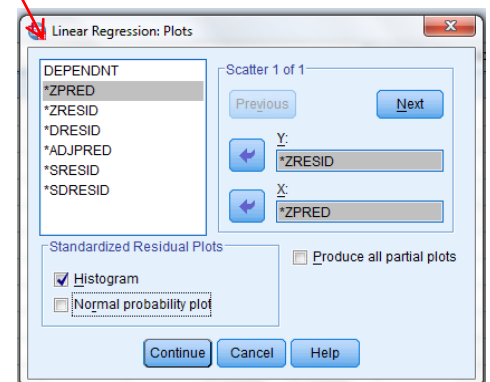
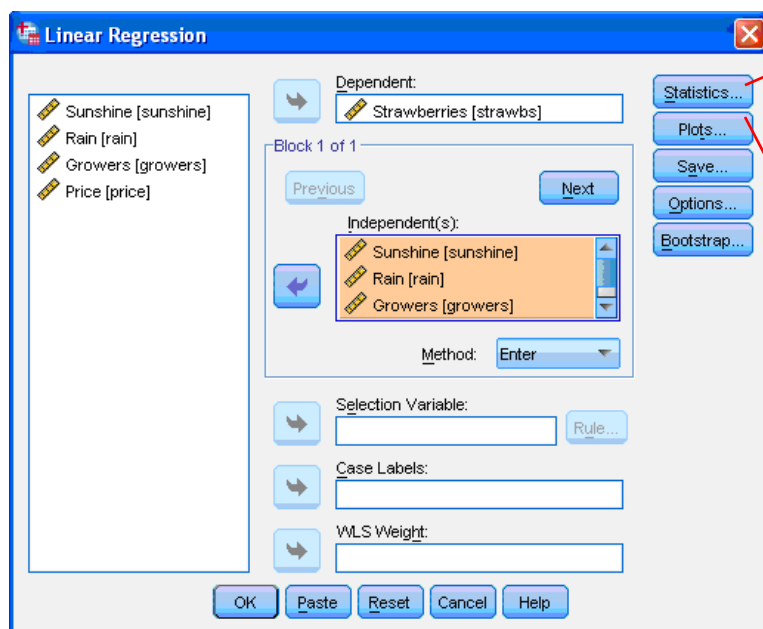
rain – the number of inches of rain

growers – number of growers in the region

price – the price per box

Questions: Will sunshine, rain, growers and price affect the sales of strawberries?

1. Select the **Analyze** menu.
2. Click on **Regression** and then on **Linear...** to open the **Linear Regression** dialogue box.
3. Select the dependent variable (strawberries) and click on the  button to move the variable into the **Dependent:** box.
4. Select the independent variables (sunshine, rain, growers, price) and click on  the button to move the variables into the **Independent(s):** box.
5. In the **Method:** drop-down list, ensure that **Enter** is selected.
6. Click **OK**.



Output for Regression Analysis:

Round 1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.901 ^a	.812	.765	1.170

a. Predictors: (Constant), Price, Rain, Sunshine, Growers

In the model summary table, the value of R square is 0.812 which implies that 81.2% for data variation can be interpreted by the model.

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	94.659	4	23.665	17.280	.000 ^a
	Residual	21.912	16	1.370		
	Total	116.571	20			

a. Predictors: (Constant), Price, Rain, Sunshine, Growers

b. Dependent Variable: Strawberries

The ANOVA table reveals that the value of Sig. is 0.000 which is less than 0.05. So the regression model is overall significant in this case.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-29.115	17.304		-1.683	.112		
	Sunshine	.100	.029	.483	3.443	.003	.597	1.674
	Rain	.201	.183	.133	1.101	.287	.804	1.244
	Growers	.062	.045	.238	1.378	.187	.393	2.547
	Price	20.492	16.234	.256	1.262	.225	.286	3.499

a. Dependent Variable: Strawberries

The Coefficients table shows that Sunshine is a significant independent variable since its Sig. = 0.003 < 0.05. The other independent variables Rain, Growers and Price have Sig.>0.05 and are insignificant. The insignificant independent variable whose Sig. is the largest will be removed from the regression. In this case, **Rain** will not be considered in the regression analysis when it is re-run.

Round 2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.893 ^a	.798	.762	1.178

a. Predictors: (Constant), Price, Sunshine, Growers

In the model summary table, the value of R square is 0.798 which implies that 79.8% for data variation can be interpreted by the model.

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	93.000	3	31.000	22.357	.000 ^a
	Residual	23.572	17	1.387		
	Total	116.571	20			

a. Predictors: (Constant), Price, Sunshine, Growers

b. Dependent Variable: Strawberries

The ANOVA table reveals that the value of Sig. is 0.000 which is less than 0.05. So the regression model is overall significant in this case.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-33.646	16.912		-1.990	.063		
	Sunshine	.104	.029	.505	3.611	.002	.609	1.641
	Growers	.064	.045	.246	1.416	.175	.393	2.543
	Price	23.459	16.108	.293	1.456	.164	.294	3.402

a. Dependent Variable: Strawberries

The Coefficients table shows that Sunshine is a significant independent variable since its Sig. = 0.002 < 0.05. The other independent variables Growers and Price have Sig. > 0.05 and are insignificant. **Growers** will not be considered in the regression analysis when it is re-run.

Round 3

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.880 ^a	.774	.749	1.210

a. Predictors: (Constant), Price, Sunshine

In the model summary table, the value of R square is 0.774 which implies that 77.4% for data variation can be interpreted by the model.

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	90.221	2	45.111	30.815	.000 ^a
	Residual	26.350	18	1.464		
	Total	116.571	20			

a. Predictors: (Constant), Price, Sunshine

b. Dependent Variable: Strawberries

The ANOVA table reveals that the value of Sig. is 0.000 which is less than 0.05. So the regression model is overall significant in this case.

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-28.916	17.034		-1.698	.107		
	Sunshine	.099	.029	.479	3.365	.003	.620	1.614
	Price	39.991	11.399	.499	3.508	.003	.620	1.614

a. Dependent Variable: Strawberries

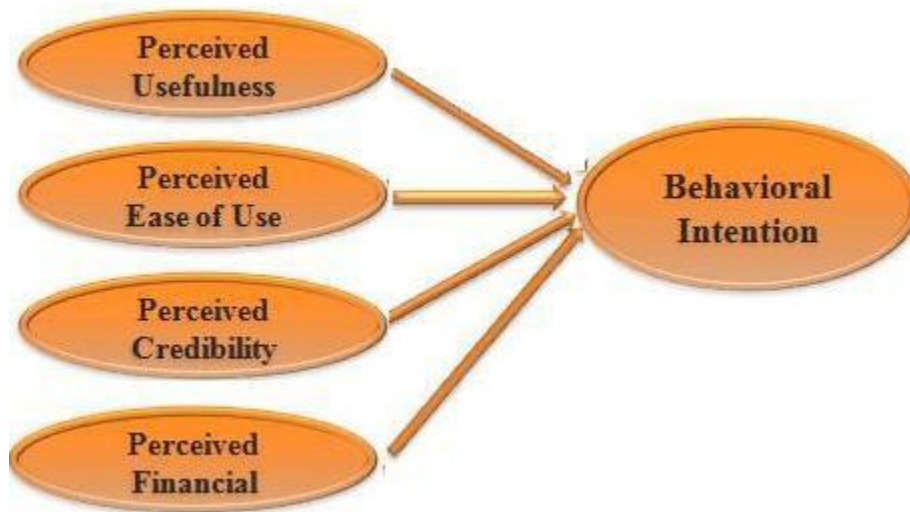
The Coefficients table shows that both Sunshine and Price are significant independent variables since their Sig. = 0.003 < 0.05.

Example 1

“A study of consumers’ buying behavior for purchasing smart phone in Hong Kong”

Research Objectives	Questionnaire
1. Understand people’s purchase behavior of smart phones	A1 – A3, C12 – 15
2. Evaluate which mobile services are valuable to customers	A4
3. Analyze people’s satisfaction with various brands of smart phone	A5
4. Identify critical factors for affecting the use of mobile services	B6 – B11

Research model for factors affecting the use of mobile services



Hypothesis testing of the above research model

H1: Perceived usefulness is positively related to Behavioral Intentions.

H2: Perceived ease to use is positively related to Behavioral Intentions.

H3: Perceived credibility is positively related to Behavioral Intentions.

H4: Perceived financial resources is positively related to Behavioral Intentions.

Part A – Consumer Behavior of Using Smart Phone

【In question 1-4, please tick '✓' the appropriate box(es) under your opinions.】

1	Are you using smart-phone?
	☐ Yes (Please continue)
	☐ No (End of questionnaire, thanks for your time)
2	How much is your current smart phone? (Select <u>ONE</u> answer only)
	☐ Below \$1000
	☐ \$1000 - <\$3000
	☐ \$3000 - <\$5000
	☐ \$5000 or above
3	Which brand of smart phone are you currently owned? (Select <u>ONE</u> answer only)
	☐ Apple
	☐ Blackberry
	☐ HTC
	☐ Motorola
	☐ Nokia
	☐ Samsung
	☐ Others
4	Which applications do you use most often? (You can select <u>MORE THAN ONE</u> answers)
	☐ Internet
	☐ Mail Box
	☐ Music Player
	☐ Text Messaging
	☐ Digital Diary
	☐ Digital Camera
	☐ Apps Store
	☐ Maps/ GPS
	☐ Entertainment information
	☐ Others

5		Strongly Strongly Disagree					Agree	
	Please rate the satisfaction level of your current smart phone	1	2	3	4	5		

Part B – Consumer Intention of Using Mobile Service

Please circle one number for each of the statements below.

6	Services Usefulness 服務有效性	Strongly Disagree					Strongly Agree	
	Using mobile services can enhance my job performance	1	2	3	4	5		
	Using mobile services can make my life more convenient	1	2	3	4	5		
	I recognize mobile services are useful to me	1	2	3	4	5		

7	Services Easiness 服務易用性	Strongly Disagree					Strongly Agree	
	Learning to use mobile services is easy to me	1	2	3	4	5		
	I would easily become skillful at using mobile services	1	2	3	4	5		
	I find that mobile services are easy to use	1	2	3	4	5		

8	Services Credibility 服務可靠性	Strongly Disagree					Strongly Agree	
	I believe using mobile services will not disclose my personal information	1	2	3	4	5		
	I find that mobile services are secure when processing my transactions	1	2	3	4	5		

9	Personal Financial Resources 個人財政狀況	Strongly Strongly Disagree					Agree	
	I do not consider financial resource is a barrier to use mobile services (e.g. to pay for data usage, voice call, subscription and/or service)	1	2	3	4	5		
	I have enough financial resources to use mobile services (e.g. to pay for data usage, voice call, subscription and/or service)	1	2	3	4	5		

10	Personal Skills 個人技術	Strongly Strongly Disagree					Agree	
	I would use mobile services							
	...if there is a built-in help facility to assist me	1	2	3	4	5		
	...if someone else has used it before I have tried it	1	2	3	4	5		
	...if someone has shown me how to use it	1	2	3	4	5		

11	Behavioral Intention					
	Suppose that I have access to the mobile services, I intend to use them	Strongly Disagree	3	4	Agree	
		1	2		5	
	I intend to increase the usage of mobile services in the future	1	2	3	4	5

Part C -Personal Information

[In question 12-15 please tick '✓' the appropriate box(es) below]

12	Gender
	☐ Male ☐ Female

13	Age	
	☐ 18 or below	
	☐ 19 - 29	
	☐ 30 - 39	
	☐ 40 - 49	
	☐ 50 or above	

14	Average Monthly income	
	☐ Below HK\$ 5,000	
	☐ HK\$ 5,000 - < HK\$ 10,000	
	☐ HK\$ 10,000 - < HK\$ 20,000	
	☐ HK\$ 20,000 - < HK\$ 30,000	
	☐ HK\$ 30,000 or above	

15	Education level	
	☐ Secondary or below	
	☐ Diploma or Higher Diploma	
	☐ Degree	
	☐ Master or above	

- The End -

Thank you for taking the time to complete this questionnaire.

Example2: Supermarket Survey

Objectives

1. Obtain demographics of customers
2. Determine the purchasing behavior of customers
3. Determine which attributes of supermarket are critical to customers

Please tick “√” for your appropriate opinions.

Questionnaire

Q1. How much do you spend per visit of supermarket?

[1] Less than \$100 [2] \$100 - \$500 [3] \$501 - \$1000 [4] Above \$1000

Q2. Please rate how important the following values are to you.

(Please circle one number for each statement)

	Strongly Disagree				Strongly Agree		
1. Good customer service	1	2	3	4	5	6	7
2. Food is fresh	1	2	3	4	5	6	7

Q3. What is your Gender?

[1] Male [2] Female

Q4. What is your monthly income?

[1] Less than \$10,000 [2] \$10,000 - \$20,000 [3] Above \$20,000

P.S. Q3 and Q4 will answer Objective 1

Q1 will answer Objective 2

Q2 will answer Objective 3

Survey Result

Q1	Q2.1	Q2.2	Q3	Q4
1	4	5	1	1
1	5	5	2	2
3	7	6	2	2
2	5	5	1	2
2	4	6	1	1
2	6	6	2	2
2	5	6	2	1
3	6	7	1	3
1	4	6	1	2
4	7	7	2	3

Example 3:**Automobile Market Case Questionnaire****Section 1:** Demographics**Section 2:** Issues that Consumers Consider when Buying Luxury Automobiles**Section 3:** Car Attributes**Section 4:** List of Values**Questionnaire****Luxury Automobile Survey**

We are surveying people who have purchased a luxury automobile within the last year. Your help in completing this questionnaire is much appreciated. Please be assured that all your responses are confidential and will not be linked to you in anyway.

Please tick “√” for your appropriate opinions

1 To analyze the information we get from this survey, we need to be able to classify information. The information about yourself will not be used for identification, but used only for establishing broad categories.

A What is your Age? (years).		
[2] 35 & Under	[4] 46 - 55	[6] 65 +
[3] 36 - 45	[5] 56 - 65	

B What is your Gender ?	
[1] Male	[0] Female

C What is your Highest Formal Qualification?	
[1] Not Completed High School	[4] College Graduate
[2] High School Graduate	[5] Graduate Degree
[3] Attended some College	

D What is your Personal Annual Income Before Tax? (Dollars/Year Before Tax).	
[1] Less than \$35,000	[3] \$50,001 – \$65,000
[2] \$35,000 - \$50,000	[4] \$65,000 +

E What Type of Luxury Car do you currently own?		
[1] American Car	[2] European Car	[3] Japanese Car

2	Please rate the extent to which you agree or disagree with the following statements regarding Buying a Luxury Automobile. (Please circle one number for each statement).	<i>Strongly Disagree</i>	<i>Strongly Agree</i>					
1.	Having a luxury car is a major part of my fun and excitement.	1	2	3	4	5	6	7
2.	Owning a luxury car is a part of "being good to myself".	1	2	3	4	5	6	7
3.	When I was able to buy my first luxury car, I felt a sense of accomplishment.	1	2	3	4	5	6	7
4.	I enjoy giving my friends advice about luxury cars.	1	2	3	4	5	6	7
5.	Getting a good deal when I buy a luxury car makes me feel better about myself.	1	2	3	4	5	6	7
6.	I seek novelty and I am willing to try new innovations in cars	1	2	3	4	5	6	7
7.	I tend to buy the same brand of the car several times in a row.	1	2	3	4	5	6	7
8.	I tend to buy from the same dealer several times in a row.	1	2	3	4	5	6	7
9.	I usually use sources of information such as <i>consumer reports</i> in deciding on a car.	1	2	3	4	5	6	7
10.	I usually visit three or more dealerships before I buy a car.	1	2	3	4	5	6	7
11.	I would read a brochure or watch a video about defensive driving.	1	2	3	4	5	6	7
12.	When buying a new luxury car, my family's opinion is very important to me.	1	2	3	4	5	6	7
13.	My family usually accompanies me when I am shopping for a new luxury car.	1	2	3	4	5	6	7
14.	I usually rely upon ads and salespersons for information on cars.	1	2	3	4	5	6	7
15.	I usually rely upon friends and acquaintances for information on cars.	1	2	3	4	5	6	7
16.	When shopping for a car, it is important that the car dealer make me feel at ease.	1	2	3	4	5	6	7
17.	Most of my friends drive luxury import cars.	1	2	3	4	5	6	7
18.	Most of my friends drive luxury domestic cars.	1	2	3	4	5	6	7
19.	I think celebrity endorsers in ads influence people's choices of luxury cars.	1	2	3	4	5	6	7
20.	I would not buy a luxury car if I felt that my debt level is higher than usual.	1	2	3	4	5	6	7

3	Please rate how important the following Car Attributes are to you. (Please circle one number for each statement).	<i>Very Unimportant</i>							<i>Very Important</i>
1.	Comfort	1	2	3	4	5	6	7	
2.	Safety	1	2	3	4	5	6	7	
3.	Power	1	2	3	4	5	6	7	
4.	Speed	1	2	3	4	5	6	7	
5.	Styling	1	2	3	4	5	6	7	
6.	Durability	1	2	3	4	5	6	7	
7.	Low maintenance cost	1	2	3	4	5	6	7	
8.	Reliability	1	2	3	4	5	6	7	
9.	Warranty	1	2	3	4	5	6	7	
10.	Nonpolluting	1	2	3	4	5	6	7	
11.	High gas mileage	1	2	3	4	5	6	7	
12.	Speed of repairs	1	2	3	4	5	6	7	

4	Please rate how important the following Values are to you. (Please circle one number for each statement).	<i>Very Unimportant</i>							<i>Very Important</i>
1.	Fun-Enjoyment-Excitement	1	2	3	4	5	6	7	
2.	Sense of belonging	1	2	3	4	5	6	7	
3.	Being well respected	1	2	3	4	5	6	7	
4.	Self-fulfillment	1	2	3	4	5	6	7	
5.	Sense of accomplishment	1	2	3	4	5	6	7	
6.	Warm relationship	1	2	3	4	5	6	7	
7.	Security	1	2	3	4	5	6	7	
8.	Self-respect	1	2	3	4	5	6	7	

- The End -

Thank you for your time and effort in completing this questionnaire. Please return this questionnaire in the prepaid envelope provided.