

[Home](#) / [Courses](#) / [ACCB4017](#) / [Assessment \(Test\)](#) / [Software Development Test \(Friday 1st April\) - BSc/HND group](#)[Steffan Wilkins](#)**Started on** Friday, 1 April 2022, 11:01 AM**State** Finished**Completed on** Friday, 1 April 2022, 12:00 PM**Time taken** 59 mins 22 secs**Grade** 57.0 out of 60.0 (95%)Question **1**

Correct

Mark 1.0 out of 1.0

What type would Python infer for a variable holding the following value?

John

Answer:



The correct answer is: string

Response history

Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:02	Saved: String	Answer saved	
3	1/04/22, 12:00	Attempt finished	Correct	1.0

Question **2**

Correct

Mark 1.0 out of 1.0

What type would Python infer for a variable holding the following value?

2

Answer:

Integer



The correct answer is: int

Comment:

Correct

Response history				
Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:02	Saved: Integer	Answer saved	
<u>3</u>	1/04/22, 12:00	Attempt finished	Incorrect	0.0
4	1/04/22, 13:57	Manually graded 1 with comment: Correct <u>Gaynor Thomas</u>	Correct	1.0

Question **3**

Correct

Mark 1.0 out of 1.0

What type would Python infer for a variable holding the following value?

0.004

Answer:



The correct answer is: float

Response history

Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:02	Saved: Float	Answer saved	
3	1/04/22, 12:00	Attempt finished	Correct	1.0

Question **4**

Correct

Mark 1.0 out of 1.0

Is the below a valid Python variable name? If not, why not?

My_Number = 24

Answer:



The correct answer is: Yes

Response history

Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:03	Saved: Yes	Answer saved	
3	1/04/22, 12:00	Attempt finished	Correct	1.0

Question **5**

Correct

Mark 1.0 out of 1.0

Is the below a valid Python variable name? If not, why not?

except = 23

Answer:



The correct answer is: No

Comment:

Correct - reserved word

Response history

Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:04	Saved: No. As except is a command	Answer saved	
<u>3</u>	1/04/22, 12:00	Attempt finished	Incorrect	0.0
4	1/04/22, 13:57	Manually graded 1 with comment: Correct - reserved word Gaynor Thomas	Correct	1.0

Question **6**

Correct

Mark 1.0 out of 1.0

Is the below a valid Python variable name? (Yes/No) If not, why not?

`_my_price = 3`

Answer:



The correct answer is: Yes

Response history

Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:05	Saved: Yes	Answer saved	
3	1/04/22, 12:00	Attempt finished	Correct	1.0

Question **7**

Complete

Mark 5.0 out of 5.0

What errors are present in the following code welcoming a user to a program? Write your answers in the box below. Line numbers are included for easy reference

```
1 print(Welcome to my program")
2
3 print("Please enter your name: ")
4 myName = int(input())
5
6 print("Welcome, " myName)
7
8 print("I shall say hello to you 10 times: ")
9
10 for counter in range(0, 11)
11     print("Hello")
```

There's a missing quotation on line 1 right after the first bracket.

In line 4 myName should be set to string not as an integer

In line 6 there is no comma after the quote, to separate the quote and the variable.

At the end of line 10 there is no colon. Also the loop goes on for 11 times where it says in line 8 it should go 10 times

Write your answers here (describe the errors found eg "Missing quotation mark on Line 4")

Comment:
Good

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:10	Saved: There's a missing quotation on line 1 right after the first bracket. In line 6 there is no comma after the quote, to separate the quote and the variable. At the end of line 10 there is no colon.	Answer saved	
3	1/04/22, 11:59	Saved: There's a missing quotation on line 1 right after the first bracket. In line 4 myName should be set to string not as an integer In line 6 there is no comma after the quote, to separate the quote and the variable. At the end of line 10 there is no colon. Also the loop goes on for 11 times where it says in line 8 it should go 10 times	Answer saved	
4	1/04/22, 12:00	Attempt finished	Complete	
5	21/04/22, 12:43	Manually graded 5 with comment: Good Gaynor Thomas	Complete	5.0

Question 8

Correct

Mark 2.0 out of 2.0

How many iterations does the following loop have?

```
for i in range(4, 8, 1):
    print("Hello")
```

Answer:

4



The correct answer is: 4

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:11	Saved: 4	Answer saved	
3	1/04/22, 12:00	Attempt finished	Correct	2.0

Question **9**

Correct

Mark 2.0 out of 2.0

How many iterations does the following loop have?

```
for i in range(1, 9):  
    print("Hello")
```

Answer:



The correct answer is: 8

Response history

Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:11	Saved: 8	Answer saved	
3	1/04/22, 12:00	Attempt finished	Correct	2.0

Question **10**

Correct

Mark 3.0 out of 3.0

What is the value of the variable *total* after the following code is executed?

```
total = 1

for x in range(0, 8, 1):
    total = total + x

    if x == 5:
        total = 0
```

Answer:



The correct answer is: 13

Response history

Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:13	Saved: 13	Answer saved	
3	1/04/22, 12:00	Attempt finished	Correct	3.0

Question **11**

Correct

Mark 0.5 out of 0.5

Given the following values $x=5$, $y=3$, $z=12$ is the statement below true or false?

 $z < y * x$

Select one:

☒ True ✓☐ False

The correct answer is 'True'.

Response history

Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:14	Saved: True	Answer saved	
3	1/04/22, 12:00	Attempt finished	Correct	0.5

Question **12**

Correct

Mark 0.5 out of 0.5

Given the following values $x=5$, $y=3$, $z=12$ is the statement below true or false?

 $x == y$

Select one:

☐ True☒ False ✓

The correct answer is 'False'.

Response history

Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:14	Saved: False	Answer saved	
3	1/04/22, 12:00	Attempt finished	Correct	0.5

Question **13**

Correct

Mark 0.5 out of 0.5

Given the following values $x=5$, $y=3$, $z=12$ is the statement below true or false?

 $x = z-7$

Select one:

☒ True ✓☐ False

The correct answer is 'True'.

Response history

Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:15	Saved: True	Answer saved	
3	1/04/22, 12:00	Attempt finished	Correct	0.5

Question **14**

Correct

Mark 0.5 out of 0.5

Given the following values $x=5$, $y=3$, $z=12$ is the statement below true or false?

 $z = y*4$

Select one:

☒ True ✓☐ False

The correct answer is 'True'.

Response history

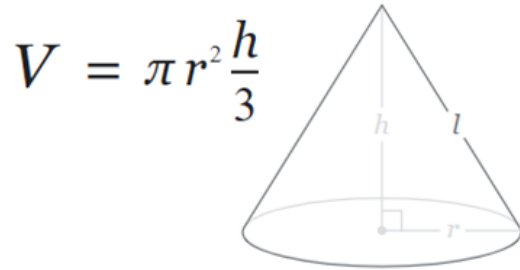
Step	Time	Action	State	Marks
<u>1</u>	1/04/22, 11:01	Started	Not yet answered	
<u>2</u>	1/04/22, 11:18	Saved: True	Answer saved	
3	1/04/22, 12:00	Attempt finished	Correct	0.5

Question **15**

Complete

Mark 10.0 out of 10.0

The volume of a cone is calculated using the formula:



Task:

Write a program to calculate the volume using the above formula.

Allow the user to enter the measurements for r and h . Both r and h should be positive numbers. You can set pi to 3.142

Print the volume on the screen to 2 decimal places

Write your program using Python/PyCharm (or any other Python editor you may favour)

Copy and paste your code into the box below for submission.

```
pi = 3.142

check = 0

while check == 0:
    radius = float(input("Please insert the radius of the base of the cone: "))
    height = float(input("Please insert the height of the center of the cone: "))

    if radius > 0 and height > 0:
        vol = pi * (radius ** 2) * (height / 3)
        print("The volume of your cone equals", round(vol, 2))
        check = 1
    else:
        print("Sorry the numbers you inserted seems to be invalid please try again. \n")
```

Comment:

Good. You might like to inform the user which of the entered inputs were invalid (or both) but I'm not going to quibble.

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:28	Saved: pi = 3.142 check = 0 while check == 0: radius = float(input("Please insert the radius of the base of the cone: ")) height = float(input("Please insert the height of the center of the cone: ")) if radius > 0 and height > 0: vol = pi * (radius ** 2) * (height / 3) print("The volume of your cone equals", round(vol, 2)) check = 1 else: print("Sorry the numbers you inserted seems to be invalid please try again. \n")	Answer saved	

Step	Time	Action	State	Marks
3	1/04/22, 12:00	Attempt finished	Complete	
4	21/04/22, 15:42	Manually graded 10 with comment: Good. You might like to inform the user which of the entered inputs were invalid (or both) but I'm not going to quibble. Gaynor Thomas	Complete	10.0

Question **16**

Complete

Mark 13.0 out of 15.0

A salesman wants to calculate the number of miles he has covered in the last working week (Monday to Friday), and also the new total mileage for his car which was 8600 miles at the beginning of the week.

Start by declaring an empty list eg

miles = []

- 1. Prompt the user to enter the five mileage figures for the week into the list.**
- 2. Print each of the mileage figures on the screen.**
- 3. Calculate the total mileage for the week.**
- 4. Calculate the new mileage for the car (it was 8600 at the start of the week)**

Use loops where appropriate

Sample output:

Enter next day's miles: 34.5

Enter next day's miles: 67.8

Enter next day's miles: 45

Enter next day's miles: 56.2

Enter next day's miles: 21.3

Here are the daily miles covered:

34.5 67.8 45.0 56.2 21.3

The total mileage for the week was: 224.8

New total mileage for the car is: 8824.8

Write your program using Python/PyCharm (or any other Python editor you may favour)

Copy and paste your code into the box below for submission.

```

miles = []
totalweek = 0

for i in range(0, 5):
    daytrav = float(input("Enter next day's miles: "))
    miles.append(daytrav)

print("\nHere are the daily miles covered:")

for i in range(0, len(miles)):
    print(miles[i], end=" ")
    totalweek += miles[i]

print("\n\nThe total mileage for the week was:", totalweek)
print("New total mileage for the car is:", (totalweek + 8600))

```

Comment:

Good. You might also consider validation so that miles aren't negative or way out of range (implicit in the question)

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:41	Saved: miles = [] totalweek = 0 for i in range(0, 5): daytrav = float(input("Enter next days miles: ")) miles.append(daytrav) print("\nHere are the daily miles covered:") for i in range(0, len(miles)): print(miles[i], end=" ") totalweek += miles[i] print("\n\nThe total mileage for the week was:", totalweek) print("New total mileage for the car is:", (totalweek + 8600))	Answer saved	

Step	Time	Action	State	Marks
3	1/04/22, 12:00	Attempt finished	Complete	
4	21/04/22, 16:22	Manually graded 13 with comment: Good. You might also consider validation so that miles aren't negative or way out of range (implicit in the question) Gaynor Thomas	Complete	13.0

Question **17**

Complete

Mark 14.0 out of 15.0

Task: Write a function called `entermeasurement()` to allow the user to enter a measurement for a parcel, length, width and height, in turn. The function should be called 3 times, once for each of the

Jump to...

width * height)

Software Development Test - for Joe ►

Sample output:

Enter your next measurement:

12.5

Enter your next measurement:

18.2

Enter your next measurement:

6.5

The measurements you entered (length/width/height) were: 12.5 18.2 6.5

The volume of the parcel is: 1478.75

Write your program using Python/PyCharm (or any other Python editor you may favour)

Copy and paste your code into the box below for submission.

```
def entermeasurement():
    measure = float(input("Enter your next measurement: "))
    return measure

length = entermeasurement()
width = entermeasurement()
height = entermeasurement()

print("The measurements you entered (length/width/height) were:", length, width, height)
print("The volume of your parcel is:", (length * width * height))
```

Comment:

Good. You could also consider validating for negative inputs (impossible for a parcel) within your function

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:55	Saved: def entermeasurment(): measure = float(input("Enter your next measurement: ")) return measure length = entermeasurment() width = entermeasurment() height = entermeasurment() print("The measurements you entered (length/width/height) were:", length, width, height) print("The volume of your passel is:", (length * width * height))	Answer saved	
3	1/04/22, 12:00	Attempt finished	Complete	
4	21/04/22, 17:14	Manually graded 14 with comment: Good. You could also consider validating for negative inputs (impossible for a parcel) within your function Gaynor Thomas	Complete	14.0