

[Home](#) / [Courses](#) / [ACCB4017](#) / [Assessment \(Test\)](#) / [Software Development Test \(Friday 1st April\) - BSc/HND group](#)[Kian Nightingale](#)**Started on** Friday, 1 April 2022, 11:01 AM**State** Finished**Completed on** Friday, 1 April 2022, 11:54 AM**Time taken** 53 mins 23 secs**Grade** 51.0 out of 60.0 (85%)Question **1**

Correct

Mark 1.0 out of 1.0

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

bert

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, 11:01	Saved: String	Answer saved	
3	1/04/22, 11:54	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?

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, 11:01	Saved: Float	Answer saved	
3	1/04/22, 11:54	Attempt finished	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?

64995

Answer:



The correct answer is: int

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, 11:01	Saved: Integer	Answer saved	
3	1/04/22, 11:54	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?

except = 23

Answer:

✘

The correct answer is: No

Comment:

Correct - reserved word, but I'll accept your answer :)

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:01	Saved: Valid	Answer saved	
3	1/04/22, 11:54	Saved: Invalid, except is a reserved function.	Answer saved	
4	1/04/22, 11:54	Attempt finished	Incorrect	0.0
5	1/04/22, 13:56	Manually graded 1 with comment: Correct - reserved word, but I'll accept your answer :) Gaynor Thomas	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?

return = 25

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, 11:02	Saved: Valid	Answer saved	
<u>3</u>	1/04/22, 11:03	Saved: Invalid, Return is a reserved function	Answer saved	
<u>4</u>	1/04/22, 11:54	Attempt finished	Incorrect	0.0
5	1/04/22, 13:57	Manually graded 1 with comment: Correct, reserved word <u>Gaynor Thomas</u>	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?

try3 = 8

Answer:



The correct answer is: Yes

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: Valid	Answer saved	
<u>3</u>	1/04/22, 11:54	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 **7**

Complete

Mark 4.0 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")
```

Line 1 does not contain a second " mark, the correct statement should be :

```
print("Welcome to my program")
instead of :
```

```
print(Welcome to my program")
the variable myName is cast as an integer instead of a string and the brackets are in the correct order.
```

```
myName = int(input())
```

in line 6 the comma is inside the quotation marks.

```
print("Welcome, " myName)
```

in line 10 the for loop does not end with a colon.

```
for counter in range(0, 11)
```

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

Comment:

Also, the range of the for loop is 11, not 10

Response history

Step	Time	Action
<u>1</u>	1/04/22, 11:01	Started
<u>2</u>	1/04/22, 11:09	Saved: Line 1 does not contain a second " mark, the correct statement should be : print("Welcome to my program") instead of : print(Welcome to my program) the variable myName is cast as an integer instead of a string and the brackets are in the corre myName = int(input()) in line 6 the comma is inside the quotation marks. print("Welcome, " n in line 10 the for loop does not end with a colon. for counter in range(0, 11)
<u>3</u>	1/04/22, 11:54	Attempt finished
4	21/04/22, 12:42	Manually graded 4 with comment: Also, the range of the for loop is 11, not 10 <u>Gaynor Thomas</u>

Question 8

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:

8



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, 11:10	Saved: 8	Answer saved	
3	1/04/22, 11:54	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(0, 8, 2):  
    print("Hello")
```

Answer:



The correct answer is: 4

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, 11:10	Saved: 4	Answer saved	
3	1/04/22, 11:54	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, 10, 1):
    total = total + x

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

Answer:



The correct answer is: 30

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, 11:12	Saved: 30	Answer saved	
3	1/04/22, 11:54	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, 11:13	Saved: True	Answer saved	
3	1/04/22, 11:54	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?

$x > z/y$

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, 11:13	Saved: True	Answer saved	
3	1/04/22, 11:54	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?

$$z = y*4$$

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, 11:14	Saved: True	Answer saved	
3	1/04/22, 11:54	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?

$$z > y*y$$

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, 11:54	Attempt finished	Correct	0.5

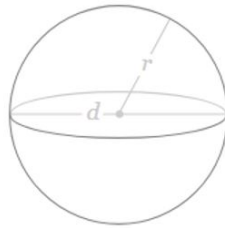
Question **15**

Complete

Mark 5.0 out of 10.0

The volume of a sphere is calculated using the formula:

$$V = \frac{4}{3} \pi r^3$$

**Task:**

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

Allow the user to enter the measurement for r . r should not be negative. You may set PI as 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.

```
rad = int(input("Enter the radius: "))

pi = 3.142
volume = 1.33 * pi * rad * rad * rad
print(round(volume))
```

Comment:

You need to validate that r is positive numbers (eg with a while loop)

You've missed the decimal places on the round, and float would be a more appropriate type for radius.

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, 11:21	Saved: rad = int(input("Enter the radius: ")) pi = 3.142 volume = 1.33 * pi * rad * rad * rad print(round(volume))	Answer saved	
<u>3</u>	1/04/22, 11:54	Attempt finished	Complete	

Step	Time	Action	State	Marks
4	21/04/22, 15:40	Manually graded 5 with comment: You need to validate that r is positive numbers (eg with a while loop) You've missed the decimal places on the round, and float would be a more appropriate type for radius. Gaynor Thomas	Complete	5.0

Question **16**

Complete

Mark 13.0 out of 15.0

Task:**Declare an empty list in your program to hold some measurements, for example:**`measures = []`

- 1. Prompt the user to enter five rainfall measurements into a list (in millimetres). (eg 3.3, 5.0, 2.6 etc)**
- 2. Print each of the entered values on the screen using a loop.**
- 3. Calculate the total rainfall (ie add all five measurements)**

Print the total on the screen.

Sample output:

```
Enter your next measurement:
3.3
Enter your next measurement:
5.0
Enter your next measurement:
2.6
Enter your next measurement:
3.4
Enter your next measurement:
12.2
You entered: 3.3 5.0 2.6 3.4 12.2

The total rainfall is 26.5
```

*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.*

```
measures = []
counter = 0
for i in range(0, 5):
    add = float(input("Please enter a measurement: "))
    measures.append(add)
for i in range(len(measures)):
    print(measures[i])
total = sum(measures)
print(total)
```

Comment:

Good. You might also consider validation so that rainfall entered isn't negative (implicit in the question)

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, 11:33	Saved: measures = [] counter = 0 for i in range(0, 5): add = float(input("Please enter a measurement: ")) measures.append(add) for i in range(len(measures)): print(measures[i]) total = sum(measures) print(total)	Answer saved	
<u>3</u>	1/04/22, 11:54	Attempt finished	Complete	

Step	Time	Action	State	Marks
4	21/04/22, 16:21	Manually graded 13 with comment: Good. You might also consider validation so that rainfall entered isn't negative (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 measurements, and the value entered returned to the main program.

Print the measurements entered from the main program, then print the volume of the parcel (length * width * height)

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():
    measurement = float(input("Enter your next measurement: "))
    return measurement

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

total = height * width * length
print(total)
```

◀ Software Development Test (Monday 28th March) - Monday group

Jump to...

Software Development Test - for Joe ►

Comment:

Good. You could consider validating for negative numbers (impossible for a parcel dimension) within the function

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:53	Saved: def entermeasurement(): measurement = float(input("Enter your next measurement: ")) return measurement height = entermeasurement() width = entermeasurement() length = entermeasurement() total = height * width * length print(total)	Answer saved	
3	1/04/22, 11:54	Attempt finished	Complete	
4	21/04/22, 17:11	Manually graded 14 with comment: Good. You could consider validating for negative numbers (impossible for a parcel dimension) within the function Gaynor Thomas	Complete	14.0