

[Home](#) / [Courses](#) / [ACCB4017](#) / [Assessment \(Test\)](#) / [Software Development Test \(Friday 1st April\) - BSc/HND group](#)[Josh Naylor](#)**Started on** Friday, 1 April 2022, 11:01 AM**State** Finished**Completed on** Friday, 1 April 2022, 12:21 PM**Time taken** 1 hour 20 mins**Grade** 32.5 out of 60.0 (54%)Question **1**

Correct

Mark 1.0 out of 1.0

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

Christopher

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, 12:21	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:

✘

The correct answer is: int

Comment:

Correct - spelt "integer" :)

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: interger	Answer saved	
<u>3</u>	1/04/22, 12:21	Attempt finished	Incorrect	0.0
4	1/04/22, 13:52	Manually graded 1 with comment: Correct - spelt "integer" :) <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?

-26.1

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, 11:03	Saved: float	Answer saved	
3	1/04/22, 12:21	Attempt finished	Correct	1.0

Question **4**

Incorrect

Mark 0.0 out of 1.0

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

finally = 1

Answer:



The correct answer is: No

Comment:

No, finally is a reserved word in Python (part of the language)

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: Yes	Answer saved	
<u>3</u>	1/04/22, 12:21	Attempt finished	Incorrect	0.0
4	1/04/22, 13:53	Manually graded 0 with comment: No, finally is a reserved word in Python (part of the language) <u>Gaynor Thomas</u>	Incorrect	0.0

Question **5**

Incorrect

Mark 0.0 out of 1.0

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

My_Number = 24

Answer:

no it has a capital at the start



The correct answer is: Yes

Comment:

Capitals are valid, wherever they appear.

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 it has a capital at the start	Answer saved	
<u>3</u>	1/04/22, 12:21	Attempt finished	Incorrect	0.0
4	1/04/22, 13:53	Manually graded 0 with comment: Capitals are valid, wherever they appear. Gaynor Thomas	Incorrect	0.0

Question **6**

Incorrect

Mark 0.0 out of 1.0

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

end.value = 8

Answer:



The correct answer is: No

Comment:

No, the full stop is a special character and not valid for use in variable names

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, 11:06	Saved: yes	Answer saved	
<u>3</u>	1/04/22, 12:21	Attempt finished	Incorrect	0.0
4	1/04/22, 13:54	Manually graded 0 with comment: No, the full stop is a special character and not valid for use in variable names <u>Gaynor Thomas</u>	Incorrect	0.0

Question **7**

Complete

Mark 3.0 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")
```

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

missing quotes in line 1 at the start of welcome

line 6 the quotes marks should be be the before the comma

line 10 should have ":" them at the end of it

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

Comment:

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

On line 4, the name should not be cast as an int - it should be a string.

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:14	Saved: Write your answers here (describe the errors found eg "Missing quotation mark on Line 4") missing quotes in line 1 at the start of welcome line 6 the quotes marks should be be the before the comma	Answer saved	
3	1/04/22, 11:19	Saved: Write your answers here (describe the errors found eg "Missing quotation mark on Line 4") missing quotes in line 1 at the start of welcome line 6 the quotes marks should be be the before the comma line 10 should have ":" them at the end of it	Answer saved	
4	1/04/22, 12:21	Attempt finished	Complete	
5	21/04/22, 12:42	Manually graded 3 with comment: Also, the range of the loop is 11, not 10. On line 4, the name should not be cast as an int - it should be a string. Gaynor Thomas	Complete	3.0

Question **8**

Incorrect

Mark 0.0 out of 2.0

How many iterations does the following loop have?

```
for i in range(4, 8, 1):  
    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, 11:19	Saved: 3	Answer saved	
3	1/04/22, 12:21	Attempt finished	Incorrect	0.0

Question **9**

Correct

Mark 2.0 out of 2.0

How many iterations does the following loop have?

```
for i in range(1, 6):  
    print("Hello")
```

Answer:



The correct answer is: 5

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, 11:20	Saved: 5	Answer saved	
3	1/04/22, 12:21	Attempt finished	Correct	2.0

Question **10**

Correct

Mark 3.0 out of 3.0

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

```
total=1

for x in range (0,9):
    total=total + x

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

Answer:



The correct answer is: 21

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, 11:27	Saved: 21	Answer saved	
3	1/04/22, 12:21	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?

$$z = y*4$$

Select one:

☒ True ✓

☐ False

The correct answer is 'True'.

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:29	Saved: True	Answer saved	
3	1/04/22, 12:21	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 'False'.

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:31	Saved: False	Answer saved	
3	1/04/22, 12:21	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?

 $z \neq y*4$

Select one:

☐ True☒ False ✓

The correct answer is 'False'.

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:33	Saved: False	Answer saved	
3	1/04/22, 12:21	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?

 $x = z-7$

Select one:

☒ True ✓☐ False

The correct answer is 'True'.

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:34	Saved: True	Answer saved	
3	1/04/22, 12:21	Attempt finished	Correct	0.5

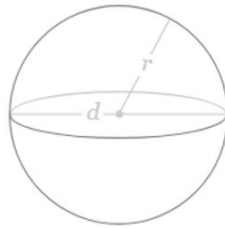
Question **15**

Complete

Mark 7.0 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.

```
pi = 3.142

print("Enter the raduis of the sphere")
raduis = int(input())
volume = 4.0/3.0*pi* raduis**3

dec = "{:.2f}".format(volume)

print('The volume of the sphere is: ',dec)
```

Comment:

OK - but you need to validate that r is a positive number (with a while loop). Also, float is a more appropriate type than int for the input

Response history

Step	Time	Action	State	Marks
1	1/04/22, 11:01	Started	Not yet answered	
2	1/04/22, 11:45	Saved: pi = 3.142 print("Enter the raduis of the sphere") raduis = int(input()) volume = 4.0/3.0*pi* raduis**3 dec = "{:.2f}".format(volume) print(The volume of the sphere is: ,dec)	Answer saved	
3	1/04/22, 12:21	Attempt finished	Complete	

Step	Time	Action	State	Marks
4	21/04/22, 15:39	Manually graded 7 with comment: OK - but you need to validate that r is a positive number (with a while loop). Also, float is a more appropriate type than int for the input Gaynor Thomas	Complete	7.0

Question **16**

Complete

Mark 7.5 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.*

```
myRainfall = []  
for counter in range(0, 5, 1):  
    print("Please enter your measurement")  
    userAnswer = float(input())  
    myRainfall.append(userAnswer)
```

Comment:

A good attempt - you've inputted the values to the list with the loop. Seems like you ran out of steam at that point?!

You might also consider validation so that rainfall 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, 12:14	Saved: myRainfall = [] for counter in range(0, 5, 1): print("Please enter your measurement") userAnswer = float(input()) myRainfall.append(userAnswer)	Answer saved	
<u>3</u>	1/04/22, 12:21	Attempt finished	Complete	

Step	Time	Action	State	Marks
4	21/04/22, 16:18	Manually graded 7.5 with comment: A good attempt - you've inputted the values to the list with the loop. Seems	Complete	7.5

Jump to...

...

[Gaynor Thomas](#)

Software Development Test - for Joe ▶

Question **17**

Complete

Mark 5.0 out of 15.0

Task: Write a function called *enterphone()* to allow the user to enter some UK mobile phone numbers. The function should be called 3 times, once for each of the numbers, and the numbers entered returned to the main program.

Print the numbers entered from the main program, then print the total cost of the call plans (£12.99 per number)

Sample output:

Enter next phone number:

07813263485

Enter next phone number:

07119348592

Enter next phone number:

07884235436

The phone numbers entered were: 07813263485 07119348592 07884235436

Total due is: £38.97

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.

```
myenterphone = []  
for counter in range(0, 3, 1):  
    print("Please enter your Phone number")  
    userAnswer = float(input())  
    myenterphone.append(userAnswer)
```

```
cost = 3 * 12.99
```

```
print(" My total", cost )
```

Comment:

You haven't used a function at all here, which was the core of 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, 12:19	Saved: myenterphone = [] for counter in range(0, 3, 1): print("Please enter your Phone number") userAnswer = float(input()) myenterphone.append(userAnswer) cost = 3 * 12.99 print(" My total", cost)	Answer saved	
<u>3</u>	1/04/22, 12:21	Attempt finished	Complete	

Step	Time	Action	State	Marks
4	21/04/22, 17:13	Manually graded 5 with comment: You haven't used a function at all here, which was the core of the question Gaynor Thomas	Complete	5.0