[redacted]

Review Test Submission: Lab 2 (Part 2/4)

[redacted]

Question 1

0.25 out of 0.25 points

When passing arguments (variables) to a function, they are matched by:

Selected Answer: The order in which the arguments are written

Response Feedback: Your answer is correct. Input arguments are matched by their order. Variable names outside the function have nothing to do with the variable names inside the function

Question 2

0 out of 0.25 points

The arguments (variables) returned by a function are matched by:

Selected Answer: Variable names

Response Feedback: Incorrect answer. Refer to lectures slides or video lectures

Question 3

0 out of 0.25 points

What would be the result after executing the following code?

```
def ex4_1():

  someOtherVar = someVar

  print(someOtherVar)

ex4_1()

someVar = "Forty-Two"

someOtherVar = 42
```

Selected Answer: The code will run and will output 42 as this is the latest definition of 'someOtherVar'

Response Feedback: Type the same code on Thonny and check the result.

Question 4

0 out of 1 points

Complete this function which adds the numbers a and b together and returns the result without assigning it to any other variable.
You need to write a single statement which include summation and return. Don't include unnecessary blank spaces.
def q4_2(a ,b):

Selected Answer: return(a+b)

Response Feedback: Don't forget the return statement

Question 5

0.5 out of 0.5 points

Now let's try something a little more complicated, write a function which returns the length of a string.
def q4_3(a):

Using your function match the following variables to their lenghts.

Question	Selected Match
"Hello world"	A. 11
""	B. 0
"abcdefghijklmnopqrstuvwxyz"	E. 26
"abcdefghijklmnopqrstusvwxyz"	C. 27

Response Feedback: Well Done.

Question 6

0 out of 1 points

Write a function which:

- Accepts two numbers (a,b)
- **Returns a list containing the following without assigning the list to any other variable:**
  - a + b
  - a - b
  - a * b
  - a / b

You need to write a single statement doing the task.

For example return .... There is a blank space after return but ensure that there are no other blank spaces after that.

Selected Answer: return([a+b,a-b,a*b,a/b]

Response Feedback: Wrong, try again. Make sure there are no blank spaces in your answer.

Question 7

1.5 out of 1.5 points

Define a function as under:
def carTrip(price,distance,economy):
The inputs are:

- Price: A price for fuel per Litre (some real number between 0.1 and 2.00)
- Distance: A distance to travel in kilometers (some integer between 1 and 1000000)
- Economy: Some value of fuel economy as L/100km (some real number between 1.0 and 20.0)

The function returns the cost to travel in this car (don't include the dollar-sign, just return the number)
Call the function 'carTrip', and make sure you pass arguments in the same order as the list describes them.

What is the cost to travel (correct to two decimal places) for the following values. Do not include the units :

A. Price = $1.3 ; Distance = 10 Km ; Economy = 5 L/100km, Cost **[x]**.

B. Price = $1.68 ; Distance = 27 Km ; Economy = 6.7 L/100km , Cost **[y]**.

C. Price = $1.86 ; Distance = 173 Km ; Economy = 4.83 L/100km , Cost **[z]**.

Specified Answer for: x 0.65

Specified Answer for: y 3.04

Specified Answer for: z 15.54

Response Feedback: Well done

Question 8

1 out of 1 points

For this question, we're going to introduce the 'if' statement. You may have seen a few of these before but you will learn more about them in the unit.
They have this basic format:

```
if(some-condition):

  <code>

elif(some-other-condition):

  <some more code>

else:

  <some final code>
```

Of course, you can omit the 'elif' and 'else' statements or have lots more 'elifs'. But if this makes sense to you, let's try the following question:

Beatrice and Barry are two rather peculiar children. They have acquired a cake and wish to share it. However, they only want to share the cake if they can split it into two evenly weighted parts. Not necessarily equal sized, but two chunks with even-numbered weights. Write a function (cutCake) which accepts a single argument, the weight of the cake (n) which will be between 1 and 100 inclusive.

If the cake can be split evenly, return True. If not, return False.

For example, for a cake weighing 6kg, it can be split into 2kg and 4kg chunks, so we would return True. We would also return True for a cake weighing 4kg, as it could be split into two 2kg chunks.

Write down a function to solve this problem.

What is the output (True / False/ Error) of your code for following weights:

A. 14 kg. **[x]**

B. 5 kg . **[y]**

C. 2 Kg. **[z]**

Specified Answer for: x True

Specified Answer for: y False

Specified Answer for: z False

Response Feedback: Correct. Well done

Question 9

1.5 out of 1.5 points

Sequential if statements are used best when you need to consider two different variables in order but are manipulating a single variable in both cases.

Complete the following function which returns the cost of a dish. It accepts two arguments, both of which will be strings.

Course

- entree = $15
- main = $25
- dessert = $10

Size

- small = x 1
- medium = x 1.25
- large = x 1.5

The function will determine what to charge the customer by first considering what course they have ordered, and then which size. You do not need to include the '$' in the return statement. Enter the cost for the following combinations correct to two decimal places.

1. Course = entree Size = small : Cost = **[x]**
2. Course = main : Size = large : Cost = **[y]**
3. Course = main : Size = medium : Cost = **[z]**
4. Course = dessert : Size = small : Cost = **[a]**

Specified Answer for: x 15.00

Specified Answer for: y 37.50

Specified Answer for: z 31.25

Specified Answer for: a 10.00

Response Feedback: Well Done

Question 10

0.75 out of 0.75 points

Write a function which takes in a numerical grade out of 100 and maps it to a letter grade according to the following rules:

- 0-50: "Fail"
- 50-60: "Pass"
- 60-70: "Credit"
- 70-80: "Distinction"
- 80-100: "High-Distinction"

Note: the lower-bound of each grade is included, but the upper-bound is not. For instance, student is considered "Pass" when the grade is 50 or 50.99999 but will be considered "Credit" when the grade is 60.

Your function should be called 'calculateGrade' and will accept a numerical grade as an argument.

For the above question match the numerical grades to their corresponding letter grades as outputted by your code.

Question	Selected Match
0	VII. Fail
50	IV. Pass
70	VI. Distinction
100	III. High-Distinction

Response Feedback: Well Done

Question 11

0 out of 0.25 points

What is the relational operator for "not equal to" in Python?

Selected Answer: <>

Response Feedback: Incorrect. Refer to the lecture slide on relational operators .

Question 12

0.25 out of 0.25 points

When testing equality of two floating point values, we should be careful because:

Selected Answer: Floating point values are rarely exactly equal and we should allow for a round off error.

Response Feedback: Well done your answer is correct. We should allow for some tolerance when testing the equality of two floating point values.

Question 13

0.25 out of 0.25 points

Execute the following Python code with any arbitrary value of 'a':

```
if a < 5:
    a = a +1  # increment
else:
    a = a -1  # decrement
```

Which one of the following statements about the program is correct.

Selected Answer: The value of 'a' will either be decremented or incremented

Response Feedback: Correct. One of the two statements must execute . Either the ones after " if " or the ones after " else ".

Question 14

0 out of 0.25 points

What will be the output after running the following code in Python when a=5

```
if a < 10:
  print('a is less than 10')
elif a > 2:
  print('a is also greater than 2')
elif a%2:
  print('a is also odd');
```

Selected Answer: a is less than 10
a is also greater than 2
a is also odd

Response Feedback: Your answer is incorrect. Read the documentation and/or lecture slides.

Question 15

0.25 out of 0.25 points

How many maximum " else " statements can we put after the " if " condition?

Selected Answer: 1

Response Feedback: Correct. There can be only one " else " or none.

Question 16

0 out of 0.25 points

Consider the following code:

```
if (test 1):
  # code block 1
  if (test 2):
    # code block 2
    if (test 3):
      # code block 3
```

Which one of the following statements is correct.

Selected Answer: If test 1 is False, test 2 and test 3 will still be checked.

Response Feedback: Your answer is incorrect. Try again.

Question 17

0 out of 0.25 points

In the following code, only one block of code will be executed. However, one code block must be executed.

```
if (test 1):

  # code block 1

elif (test 2):

  # code block 2

elif (test 3):

  # code block 3

else:

  # code block 4
```

Selected Answer: False

Response Feedback: Incorrect answer, try again.

Question 18

0 out of 0.25 points

In an "if" "elif" construct that does NOT have a final "else" condition, one block of code MUST execute.

Selected Answer: True

Response Feedback: Incorrect answer. Refer to the lecture slides and watch the short video on if-elif.

Tuesday, 17 September 2019 2:41:17 AM AWST

← OK