Module 2 Graded Assessment

Latest Submission Grade 100%

Question 1

Complete the function by filling in the missing parts. The color_translator function receives the name of a color, then prints its hexadecimal value. Currently, it only supports the three additive primary colors (red, green, blue), so it returns "unknown" for all other colors.

```
1
    def color_translator(color):
2
        if color == "red":
3
              hex_color = "#ff0000"
4
        elif color == "green":
5
              hex_color = "#00ff00"
6
        elif color == "blue":
7
              hex_color = "#0000ff"
8
        else:
9
              hex_color = "unknown"
10
        return hex_color
11
12
    print(color_translator("blue")) # Should be #0000ff
13
    print(color_translator("yellow")) # Should be unknown
    print(color_translator("red")) # Should be #ff0000
14
    print(color translator("black")) # Should be unknown
15
    print(color_translator("green")) # Should be #00ff00
16
17
    print(color_translator("")) # Should be unknown
#0000ff
unknown
#ff0000
unknown
#00ff00
unknown
```

Correct

Well done! You're breezing through the if-else clauses!

Question 2

What's the value of this Python expression: "big" > "small"

1 / 1 point

True

<u>False</u>

big

small

Correct

You nailed it! The conditional operator > checks if two values are equal. The result of that operation is a boolean: either True or False. Alphabetically, "big" is less than "small".

Question 3

What is the elif keyword used for?

1 / 1 point

To mark the end of the if statement

To handle more than two comparison cases

To replace the "or" clause in the if statement

Nothing - it's a misspelling of the else-if keyword

Correct

You got it! The elif keyword is used in place of multiple embedded if clauses, when a single if/else structure is not enough.

Question 4

Students in a class receive their grades as Pass/Fail. Scores of 60 or more (out of 100) mean that the grade is "Pass". For lower scores, the grade is "Fail". In addition, scores above 95 (not included) are graded as "Top Score". Fill in this function so that it returns the proper grade.

1 / 1 point

```
1
    def exam_grade(score):
2
        if score>95:
3
              grade = "Top Score"
4
        elif score>=60:
5
              grade = "Pass"
6
        else:
7
              grade = "Fail"
8
        return grade
9
10
    print(exam_grade(65)) # Should be Pass
11
    print(exam_grade(55)) # Should be Fail
12
    print(exam_grade(60)) # Should be Pass
13
    print(exam_grade(95)) # Should be Pass
14
    print(exam_grade(100)) # Should be Top Score
15
    print(exam_grade(0)) # Should be Fail
```

Pass
Fail
Pass
Pass
Top Score
Fail
Correct

Good job! You're getting the hang of it!

Question 5

What's the value of this Python expression: 11 % 5?

1 / 1 point

2.2

2

<u>1</u>

0

Correct

Excellent! "%" is the modulo operator, which returns the remainder of the integer division between two numbers. 11 divided by 5 equals 2 with remainder of 1.

Question 6

Complete the body of the *format_name* function. This function receives the *first_name* and *last_name* parameters and then returns a properly formatted string.

Specifically:

If both the **last_name** and the **first_name** parameters are supplied, the function should return like so:

```
print(format_name("Ella", "Fitzgerald"))
Name: Fitzgerald, Ella
```

If only **one** name parameter is supplied (either the first name or the last name), the function should return like so:

```
print(format_name("Adele", ""))
Name: Adele

or
print(format_name("", "Einstein"))
Name: Einstein
```

Finally, if both names are blank, the function should return the empty string:

```
1 print(format_name("", ""))
```

Implement below:

1 / 1 point

```
def format_name(first_name, last_name):
1
2
        # code goes here
        if (first name == "") & (last name == ""):
3
              return ""
4
5
        elif first_name == "":
6
              name = last name
7
        elif last_name == "":
              name = first_name
8
        else:
9
              name = last_name + ", " + first_name
10
        string = "Name: " + name
11
12
        return string
13
    print(format_name("Ernest", "Hemingway"))
15
    # Should return the string "Name: Hemingway, Ernest"
16
17
    print(format_name("", "Madonna"))
18
    # Should return the string "Name: Madonna"
19
20
    print(format_name("Voltaire", ""))
21
    # Should return the string "Name: Voltaire"
22
23
    print(format_name("", ""))
24
    # Should return an empty string
Name: Hemingway, Ernest
Name: Madonna
Name: Voltaire
```

Correct

Awesome! You're getting the hang of the multiple and embedded "if" clauses!

Ouestion 7

The longest_word function is used to compare 3 words. It should return the word with the most number of characters (and the first in the list when they have the same length). Fill in the blank to make this happen.

1 / 1 point

```
1
    def longest_word(word1, word2, word3):
2
        if len(word1) >= len(word2) and len(word1) >= len(word3):
3
              word = word1
4
        elif len(word2) >= len(word1) and len(word2) >= len(word3):
5
              word = word2
6
        else:
7
              word = word3
8
        return(word)
9
10
    print(longest_word("chair", "couch", "table"))
    print(longest_word("bed", "bath", "beyond"))
11
    print(longest_word("laptop", "notebook", "desktop"))
chair
beyond
notebook
```

Correct

You got it! You've figured out how to use an elif clause, well done!

Question 8

What's the output of this code?

1 / 1 point

```
1  def sum(x, y):
2    return(x+y)
3  print(sum(sum(1,2), sum(3,4)))
10
Correct
```

You nailed it! We're calling the sum function 3 times: returning 3, then 7, then adding up 3 plus 7 for the total of 10.

Question 9

What's the value of this Python expression? ((10 \geq 5*2) and (10 \leq 5*2)) 1 / 1 point

<u>True</u>

False

10

5*2

Correct

Right on! When using the "and" operator, a statement is True if both parts of the conditional are True.

Question 10

The fractional_part function divides the numerator by the denominator, and returns just the fractional part (a number between 0 and 1). Complete the body of the function so that it returns the right number. Note: Since division by 0 produces an error, if the denominator is 0, the function should return 0 instead of attempting the division.

```
def fractional_part(numerator, denominator):
1
2
        # Operate with numerator and denominator to
3
        # keep just the fractional part of the quotient
        if denominator==0:
4
5
              return 0
6
        return (numerator%denominator)/denominator
7
8
    print(fractional_part(5, 5)) # Should be 0
    print(fractional_part(5, 4)) # Should be 0.25
9
10
    print(fractional_part(5, 3)) # Should be 0.66...
    print(fractional_part(5, 2)) # Should be 0.5
11
12
    print(fractional_part(5, 0)) # Should be 0
    print(fractional_part(0, 5)) # Should be 0
13
0.0
0.25
0.66666666666666
0.5
0
0.0
```

Correct

Well done! You're handling the math operations, as well as division by 0, perfectly!