Module 2 Graded Assessment

1.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 / 1 point

```python
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
14 print(color_translator("red")) # Should be #ff0000
15 print(color_translator("black")) # Should be unknown
16 print(color_translator("green")) # Should be #00ff00
17 print(color_translator("")) # Should be unknown
```

#0000ff
unknown
#ff0000
unknown
#00ff00
unknown

Correct

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

2.Question 2

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

1 / 1 point

True

False

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".

3.Question 3

What is the elif keyword used for?

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.

4.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.

```python
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!.

5.Question 5

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

1 / 1 point

2.2

2

1

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.

6.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:

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

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

```
1 print(format_name("Adele", ""))
2 Name: Adele
 or
```

```
1 print(format_name("", "Einstein"))
2 Name: Einstein
```

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

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

Implement below:

1 / 1 point

```
1 def format_name(first_name, last_name):
2 # code goes here
3       if (first_name == "") & (last_name == ""):
4             return ""
5       if first_name == "":
6             name = last_name
7       elif last_name == "":
8             name = first_name
9       else:
10            name = last_name + ", " + first_name
11      string = "Name: " + name
12      return string
13
14 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!

7.Question 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"))
11 print(longest_word("bed", "bath", "beyond"))
12 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!

8.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.

9.Question 9

What's the value of this Python expression ((10 >= 5*2) and (10 <= 5*2))

`1 / 1 point`

True

False

10

5*2

Correct

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

10.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.

1 / 1 point

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

0.0
0.25
0.6666666666666666
0.5
0
0.0

Correct

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