Unit 2 Concepts and Coding Test

Firia Labs Concepts and Coding from CodeX Missions 6-8

* Indicates required question

1. **Student Name** *

    _____

2. **What is the best data type for this value: True** *   1 point

    Mark only one oval.

    ◯ Integer

    ◯ Float

    ◯ String

    ◯ Boolean

    ◯ Tuple

3. **What is the best data type for this value: 3.15** *   1 point

    Mark only one oval.

    ◯ Integer

    ◯ Float

    ◯ String

    ◯ Boolean

    ◯ Tuple

4.   What is the best data type for this value: 10 *   1 point

   Mark only one oval.

   ⬭ Integer

   ⬭ Float

   ⬭ String

   ⬭ Boolean

   ⬭ Tuple

5.   What is the best data type for this value: YELLOW *   1 point

   Mark only one oval.

   ⬭ Integer

   ⬭ Float

   ⬭ String

   ⬭ Boolean

   ⬭ Tuple

6.   What is the best data type for this value: "debug" *   1 point

   Mark only one oval.

   ⬭ Integer

   ⬭ Float

   ⬭ String

   ⬭ Boolean

   ⬭ Tuple

7. What code will increment the variable "number" by 1? *   1 point

    Mark only one oval.

    ◯ number = value + 1

    ◯ number = number + 1

    ◯ value = number + 1

    ◯ number = number - 1

8. What is the correct code for using a "break" command? *   1 point

    Mark only one oval.

    ```
    if buttons.was_pressed(BTN_B):
        while True:
            break
    ```

    ◯ Option 1

    ```
    if break:
        buttons.was_pressed(BTN_A)
    ```

    ◯ Option 2

    ```
    while True:
        break
    ```

    ◯ Option 3

    ```
    while True:
        if buttons.was_pressed(BTN_A):
            break
    ```

    ◯ Option 4

9. What does this code do? *   1 point

```
if choice == 0:
```

Mark only one oval.

   ⬭ Compares "choice" to 0, branching when "choice" is more than 0

   ⬭ Gives an error message

   ⬭ Compares "choice" to 0, branching when "choice" is equal to 0

   ⬭ Assigns the variable "choice" the value 0

10. What does this code do? *   1 point

```
if choice = 0:
```

Mark only one oval.

   ⬭ Compares "choice" to 0, branching when "choice" is more than 0

   ⬭ Gives an error message

   ⬭ Compares "choice" to 0, branching when "choice" is equal to 0

   ⬭ Assigns the variable "choice" the value 0

11. What is the result if BTN_B is pressed? *   1 point

```
index = 1
if buttons.was_pressed(BTN_B):
    index = index - 1
    if index == 0:
        index = 5
```

Mark only one oval.

◯ index = 1

◯ index = 0

◯ index = 5

◯ An error occurs

12. What code will give the number of items in a list? *   1 point

Mark only one oval.

◯ str(my_list)

◯ int(my_list)

◯ len(my_list)

◯ get_items(my_list)

13. What value is always the FIRST index of every list? *   1 point

Mark only one oval.

◯ 1

◯ 0

◯ A

◯ len(my_list) - 1

14. What value is always the LAST index of every list? *   1 point

Mark only one oval.

⬭ 1

⬭ 0

⬭ A

⬭ len(my_list) - 1

15. Given this list, what are the possible values of index? *   1 point

```
my_list = ["A", "B", "C", "D", "F"]
```

Mark only one oval.

⬭ 0, 1, 2, 3, 4

⬭ 1, 2, 3, 4, 5

⬭ A, B, C, D, F

⬭ len(my_list) - 1

16. Given this list, what is the item at my_list[2]? *   1 point

```
my_list = ["A", "B", "C", "D", "F"]
```

Mark only one oval.

⬭ "A"

⬭ "B"

⬭ "C"

⬭ "D"

17.   Given this code, what is the "count" variable doing? *   1 point

```
answers = ["Pizza", "Burger", "Salad",
           "Burrito", "Nothing", "Pasta"]
count = len(answers)
index = random.randrange(count)
```

Mark only one oval.

⭕ Stores the number of items in the list to use in the randrange function

⭕ Selects an item from the list and displays it on the screen

⭕ Automatically scans the list and returns the number of items

⭕ Selects a random number between 0 and the number of items in the list

18.   Given this code, what is the "index" variable doing? *   1 point

```
answers = ["Pizza", "Burger", "Salad",
           "Burrito", "Nothing", "Pasta"]
count = len(answers)
index = random.randrange(count)
```

Mark only one oval.

⭕ Stores the number of items in the list to use in the randrange function

⭕ Selects an item from the list and displays it on the screen

⭕ Automatically scans the list and returns the number of items

⭕ Selects a random number between 0 and the number of items in the list

19. Given this code, what are the possible values of "number"? *   1 point

```
index = random.randrange(4)
```

Mark only one oval.

◯ 1, 2, 3, 4, 5

◯ 0, 1, 2, 3, 4, 5

◯ 0, 1, 2, 3, 4

◯ An error will occur

20. What does this command do? *   1 point

```
my_choice = random.choice(answers)
```

Mark only one oval.

◯ Assigns "answer" a random item from "my_choice"

◯ Assigns "my_choice" a random item from "answers"

◯ Assigns "my_choice" a random number between 0 and "answers"

◯ Will cause an error

21. What is the result of this code? *   1 point

```
answers = ["Pizza", "Burger", "Salad",
           "Burrito", "Nothing", "Pasta"]
my_choice = answers[6]
```

Mark only one oval.

◯ Assigns "my_choice" the value 6

◯ Assigns "my_choice" the value "Pasta"

◯ Assigns "my_choice" a random item from the list "answers"

◯ Will cause an error

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