Section 1: Multiple Choice Questions (MCQs)

1. What is the purpose of a programming language?
   - a) To make coffee
   - ✓ b) To communicate with computers
   - c) To paint pictures
   - d) To browse the internet

2. Which of the following is a Python variable naming convention?
   - a) Variable names can start with a number
   - b) Variable names can contain spaces
   - ✓ c) Variable names are case-sensitive
   - d) Variable names cannot include underscores

3. What does the `print()` function do in Python?
   - a) Saves a file
   - ✓ b) Displays output to the screen
   - c) Takes user input
   - d) Terminates the program

4. What is the correct syntax to take user input in Python?
   - ✓ a) `input("Enter your name:")`
   - b) `scan("Enter your name:")`
   - c) `read("Enter your name:")`
   - d) `get("Enter your name:")`

5. Which of the following is used for loops in Python?
   - a) `for`
   - b) `while`
   - ✓ c) Both a and b
   - d) None of the above

6. What symbol is used to indicate a comment in Python?
   - a) //
   - b) /* */
   - ✓ c) #
   - d) --

7. Which data type is used to store a sequence of characters in Python?
   - a) int
   - b) float
   - ✓ c) string

- d) boolean

8. What keyword is used to define a function in Python?
   - a) define
   - b) func
   - ✓ c) def
   - d) function

9. What will `len([1, 2, 3, 4])` return?
   - a) 3
   - ✓ b) 4
   - c) 5
   - d) Error

10. How do you create an infinite loop in Python?
    - ✓ a) `while True:`
    - b) `for i in range(1000000):`
    - c) `while (i < 10):`
    - d) `loop forever:`

11. What will be the output of `print(3 * "abc")`?

    - a) `abcabcabc`
    - b) `abc*3`
    - ✓ c) `abc abc abc`
    - d) Error

12. Which of the following statements about Python lists is true?

    - a) Lists are immutable
    - ✓ b) Lists can store different data types
    - c) Lists must have unique elements
    - d) Lists cannot be modified once created

13. What will `bool([])` return?

    - a) `True`
    - ✓ b) `False`
    - c) `None`

- d) Error

14.How do you correctly open a file named `data.txt` for writing in Python?

- a) `open("data.txt", "r")`
- ✔ b) `open("data.txt", "w")`
- c) `open("data.txt", "a")`
- d) `open("data.txt", "x")`

15.What does `list(range(3))` return?

- ✔ a) `[0, 1, 2]`
- b) `[1, 2, 3]`
- c) `[0, 1, 2, 3]`
- d) `range(3)`