

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) `abcbcabcb`
- ☐ 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)`