

## 40 multiple-choice questions (MCQs)

**\*\*1. What is the purpose of the `for` loop in Python?\*\***

- A) To define a function
- B) To create a conditional statement
- C) To iterate over a sequence or iterable
- D) To check a condition and execute code

**\*\*Answer: C\*\***

**\*\*2. Which keyword is used to exit a loop prematurely in Python?\*\***

- A) `exit`
- B) `quit`
- C) `break`
- D) `continue`

**\*\*Answer: C\*\***

**\*\*3. How do you check if a number is even in Python?\*\***

- A) `num % 2 == 0`
- B) `num % 2 == 1`
- C) `num / 2 == 0`
- D) `num / 2 == 1`

**\*\*Answer: A\*\***

**\*\*4. What does the `continue` statement do in a loop?\*\***

- A) Exits the loop
- B) Skips the rest of the code in the loop for the current iteration and moves to the next iteration
- C) Creates an infinite loop
- D) Prints the current value of the loop variable

**\*\*Answer: B\*\***

**\*\*5. Which of the following is used to calculate the factorial of a number in Python?\*\***

- A) `math.factorial()`
- B) `factorial()`
- C) `math.factorial`
- D) `factorial`

**\*\*Answer: C\*\***

**\*\*6. What is the output of `5 \*\* 2` in Python?\*\***

- A) 10
- B) 25
- C) 7
- D) 125

**\*\*Answer: B\*\***

**\*\*7. Which operator is used for exponentiation in Python?\*\***

- A) ``^``
- B) ``**``
- C) ``^*``
- D) ``exp()``

**\*\*Answer: B\*\***

**\*\*8. In Python, how would you check if a word is a palindrome?\*\***

- A) ``word.reverse() == word``
- B) ``word == word[::-1]``
- C) ``word.palindrome()``
- D) ``is_palindrome(word)``

**\*\*Answer: B\*\***

**\*\*9. What does the ``range(3, 10, 2)`` generate in Python?\*\***

- A) ``[3, 4, 5, 6, 7, 8, 9]``
- B) ``[3, 5, 7, 9]``
- C) ``[3, 6, 9]``
- D) ``[3, 5, 8]``

**\*\*Answer: B\*\***

**\*\*10. Which operator is used for floor division in Python?\*\***

- A) ``/``
- B) ``//``
- C) ``%``
- D) ``**``

**\*\*Answer: B\*\***

**\*\*11. What is the purpose of the ``else`` statement in a ``for`` loop in Python?\*\***

- A) It is used to define a function.
- B) It is executed if the loop is terminated prematurely by a ``break`` statement.
- C) It is executed if the loop completes without encountering a ``break`` statement.
- D) It is used to create nested loops.

**\*\*Answer: C\*\***

**\*\*12. Which of the following is a bitwise AND operator in Python?\*\***

- A) ``&``
- B) ``|``
- C) ``^``
- D) ``~``

**\*\*Answer: A\*\***

**\*\*13. How do you check if a character is a vowel in Python?\*\***

- A) ``char.is_vowel()``
- B) ``char in 'aeiouAEIOU'``
- C) ``char.isalpha()``
- D) ``char == 'vowel'``

**\*\*Answer: B\*\***

**\*\*14. What does the ``enumerate`` function do in Python?\*\***

- A) Counts the number of elements in a list.
- B) Returns the sum of a list.
- C) Adds an index to each element in an iterable.
- D) Reverses the elements of a list.

**\*\*Answer: C\*\***

**\*\*15. Which of the following is a logical OR operator in Python?\*\***

- A) ``&``
- B) ``|``
- C) ``^``
- D) ``~``

**\*\*Answer: B\*\***

**\*\*16. What does the ``not`` operator do in Python?\*\***

- A) Performs a bitwise NOT operation.
- B) Inverts the boolean value of an expression.
- C) Performs a logical OR operation.
- D) Concatenates two strings.

**\*\*Answer: B\*\***

**\*\*17. How can you reverse a list in Python?\*\***

- A) ``list.reverse()``
- B) ``reverse(list)``
- C) ``list[::-1]``
- D) ``reversed(list)``

**\*\*Answer: C\*\***

**\*\*18. Which of the following is a relational operator in Python?\*\***

- A) ``==``
- B) ``and``
- C) ``not``
- D) ``or``

**\*\*Answer: A\*\***

**\*\*19. What is the output of `8 // 3` in Python?\*\***

- A) 2.666
- B) 2
- C) 3
- D) 2.0

**\*\*Answer: B\*\***

**\*\*20. Which keyword is used to define a function in Python?\*\***

- A) `function`
- B) `def`
- C) `define`
- D) `func`

**\*\*Answer: B\*\***

**\*\*21. What is the purpose of the `elif` statement in Python?\*\***

- A) It is used to define a function.
- B) It is executed if the `if` condition is true.
- C) It is executed if the `if` condition is false and the `elif` condition is true.
- D) It is executed if the `for` loop completes without encountering a `break` statement.

**\*\*Answer: C\*\***

**\*\*22. How can you convert a string to uppercase in Python?\*\***

- A) `string.uppercase()`
- B) `uppercase(string)`
- C) `string.upper()`
- D) `to\_upper(string)`

**\*\*Answer: C\*\***

**\*\*23. What does the `%` operator do in Python?\*\***

- A) Performs exponentiation.
- B) Performs modulus division.
- C) Performs floor division.
- D) Concatenates two strings.

**\*\*Answer: B\*\***

**\*\*24. What is the purpose of the `pass` statement in Python?\*\***

- A) It is used to create an infinite loop.
- B) It is used to define a function.
- C) It

is a placeholder that does nothing.

- D) It is used to exit a loop.

**\*\*Answer: C\*\***

**\*\*25. Which of the following is a compound assignment operator in Python?\*\***

- A) ``+=``
- B) ``++``
- C) ``--``
- D) ``*=``

**\*\*Answer: A\*\***

**\*\*26. How can you check the length of a list in Python?\*\***

- A) ``length(list)``
- B) ``list.length()``
- C) ``len(list)``
- D) ``list.size()``

**\*\*Answer: C\*\***

**\*\*27. What does the ``is`` keyword do in Python?\*\***

- A) Checks if two objects have the same value.
- B) Checks if two objects are identical (refer to the same object in memory).
- C) Checks if a variable is defined.
- D) Checks if a variable is None.

**\*\*Answer: B\*\***

**\*\*28. Which of the following is used to round a floating-point number to the nearest integer in Python?**

**\*\***

- A) ``ceil()``
- B) ``floor()``
- C) ``round()``
- D) ``int()``

**\*\*Answer: C\*\***

**\*\*29. What is the output of ``3 + 5 * 2`` in Python?\*\***

- A) 16
- B) 26
- C) 13
- D) 11

**\*\*Answer: C\*\***

**\*\*30. How do you check if a key is present in a dictionary in Python?\*\***

- A) ``key in dictionary``
- B) ``dictionary.hasKey(key)``
- C) ``key.exists(dictionary)``
- D) ``dictionary.contains(key)``

**\*\*Answer: A\*\***

**\*\*31. Which function is used to convert a string to an integer in Python?\*\***

- A) ``str()``
- B) ``int()``
- C) ``float()``
- D) ``convert()``

**\*\*Answer: B\*\***

**\*\*32. What is the purpose of the ``__init__`` method in Python classes?**

- A) It is used to initialize a loop.
- B) It is a special method called when an object is created.
- C) It is used to define a function.
- D) It is used to exit a loop.

**\*\*Answer: B\*\***

**\*\*33. What is the output of ``bool("False")`` in Python?**

- A) ``False``
- B) ``True``
- C) ``0``
- D) ``1``

**\*\*Answer: B\*\***

**\*\*34. Which of the following is a valid way to comment a single line in Python?**

- A) ``// This is a comment``
- B) ``/* This is a comment */``
- C) ``# This is a comment``
- D) ``-- This is a comment``

**\*\*Answer: C\*\***

**\*\*35. What is the purpose of the ``with`` statement in Python?**

- A) It is used for bitwise operations.
- B) It is used for exception handling and resource management.
- C) It is used for creating nested loops.
- D) It is used for rounding floating-point numbers.

**\*\*Answer: B\*\***

**\*\*36. How do you concatenate two lists in Python?**

- A) ``list1.concat(list2)``
- B) ``concat(list1, list2)``
- C) ``list1 + list2``
- D) ``list1.concatenate(list2)``

**\*\*Answer: C\*\***

**\*\*37. What does the ``strip()`` method do for strings in Python?\*\***

- A) Removes all characters from the string.
- B) Removes leading and trailing whitespaces.
- C) Converts the string to uppercase.
- D) Reverses the characters in the string.

**\*\*Answer: B\*\***

**\*\*38. Which of the following is a valid way to create an empty list in Python?\*\***

- A) ``list()`
- B) ``empty_list()`
- C) ``[]`
- D) ``new List()`

**\*\*Answer: A\*\***

**\*\*39. How can you convert a string to lowercase in Python?\*\***

- A) ``string.lower()`
- B) ``to_lower(string)`
- C) ``lowercase(string)`
- D) ``string.toLower()`

**\*\*Answer: A\*\***

**\*\*40. What is the purpose of the ``try`` and ``except`` blocks in Python?\*\***

- A) They are used for creating nested loops.
- B) They are used for exception handling.
- C) They are used for rounding floating-point numbers.
- D) They are used for bitwise operations.

**\*\*Answer: B\*\***