* Constants or Literals
* Variables and Data Types
* Getting Type and Help
* Type Hints
* Best Practices to define variables

1. What is a variable in Python?

a) A container for storing data values

b) A reserved word that can't be used as a variable name

c) A function that performs a specific task

d) A type of loop in Python

Answer: a) A container for storing data values

2. What is a constant or literal in Python?

a) A variable that can be modified

b) A reserved word that can't be used as a variable name

c) A value that can't be changed during program execution

d) A type of loop in Python

Answer: c) A value that can't be changed during program execution

3. What is the data type of the variable "x" in the following code: x = 10.5?

a) Integer

b) Float

c) String

d) Boolean

Answer: b) Float

4. Which of the following is not a valid variable name in Python?

a) myVar

b) \_my\_var

c) 1myvar

d) MY\_VAR

Answer: c) 1myvar (variable names cannot start with a number)

5. What is the output of the following code: print(type("Hello, world!"))?

a) int

b) str

c) float

d) bool

Answer: b) str

6. What is the output of the following code: x = 5, y = "10", print(x + y)?

a) TypeError

b) 15

c) "15"

d) None of the above

Answer: a) TypeError (you cannot add a string and an integer)

7. What is type hinting in Python?

a) A way to indicate the expected data type of a variable or function argument

b) A way to force a variable to be a specific data type

c) A way to write comments in code that explain the purpose of a variable or function

d) A way to define custom data types in Python

Answer: a) A way to indicate the expected data type of a variable or function argument

8. Which of the following is a best practice for naming variables in Python?

a) Using camelCase notation

b) Using underscores to separate words (snake\_case)

c) Starting variable names with a capital letter

d) Naming variables after built-in Python functions or keywords

Answer: b) Using underscores to separate words (snake\_case)

9. What is the output of the following code: print(help(str))?

a) The documentation for the str class

b) A list of all available Python modules

c) An error message

d) None of the above

Answer: a) The documentation for the str class

10. Which of the following is a valid way to assign a value of 3 to a variable called "x"?

a) x = "3"

b) x = 3.0

c) x = 3

d) All of the above

Answer: c) x = 3