Python Basics

Assignment Questions





Python Basics Questions

- 1. What is Python, and why is it popular?
- 2. What is an interpreter in Python?
- 3. What are pre-defined keywords in Python?
- 4. Can keywords be used as variable names?
- 5. What is mutability in Python?
- 6. Why are lists mutable, but tuples are immutable?
- 7. What is the difference between "==" and "is" operators in Python?
- 8. What are logical operators in Python?
- 9. What is type casting in Python?
- 10. What is the difference between implicit and explicit type casting?
- 11. What is the purpose of conditional statements in Python?
- 12. How does the elif statement work?
- 13. What is the difference between for and while loops?
- 14. Describe a scenario where a while loop is more suitable than a for loop.

Practical Questions

- 1. Write a Python program to print "Hello, World!"
- 2. Write a Python program that displays your name and age.
- Write code to print all the pre-defined keywords in Python using the keyword library.
- 4. Write a program that checks if a given word is a Python keyword.
- 5. Create a list and tuple in Python, and demonstrate how attempting to change an element works differently for each.
- 6. Write a function to demonstrate the behavior of mutable and immutable arguments.
- 7. Write a program that performs basic arithmetic operations on two user-input numbers.
- 8. Write a program to demonstrate the use of logical operators.
- 9. Write a Python program to convert user input from string to integer, float, and boolean types.
- 10. Write code to demonstrate type casting with list elements.
- 11. Write a program that checks if a number is positive, negative, or zero.
- 12. Write a for loop to print numbers from 1 to 10.
- 13. Write a Python program to find the sum of all even numbers between 1 and 50.
- 14. Write a program to reverse a string using a while loop.
- 15. Write a Python program to calculate the factorial of a number provided by the user using a while loop.