

Python Basic Practice Questions.

Data Types:

What are the main numeric data types in Python? Explain the difference between a string and a list in Python.

How do you perform type conversion in Python?

What is the purpose of the bool() function in Python?

Data Structures:

5. Create a tuple with three elements and demonstrate how to access the second element.

How do you add an element to the middle of a list in Python?

Compare and contrast the characteristics of sets and dictionaries in Python.

How can you check if a key exists in a dictionary?

If-Else Statements:

9. Write a Python program that checks if a given year is a leap year using an if-else statement.

Implement a program that categorizes a person's age into "Child," "Teenager," or "Adult" using if-else conditions.

Explain the difference between the == and is operators in Python.

For Loop:

12. Write a Python program using a for loop to print the squares of numbers from 1 to 5.

How do you iterate over the characters of a string using a for loop?

Create a list and use a for loop to print the elements in reverse order.

Explain the purpose of the enumerate() function in a for loop.

While Loop:

16. Implement a while loop that prints the Fibonacci series up to the 10th term.



Python Basic Practice Questions.

Write a Python program using a while loop to find the average of numbers in a given list.

What is the key difference between a for loop and a while loop in Python?

Functions:

19. Define a function that takes a string as input and returns its length.

Write a function that checks if a given string is a palindrome.

Explain the concept of a default parameter in a Python function.

How can you return multiple values from a Python function?

Miscellaneous:

23. What is the purpose of the range() function in Python?

How do you use list comprehension to create a new list of squared numbers?

Write a Python program to find the maximum value in a list without using the built-in max() function.

Explain the difference between break and continue statements in Python loops.

How can you handle exceptions using try, except, and finally blocks in Python?

Demonstrate the use of the zip() function in Python.

Create a lambda function that adds two numbers and use it to calculate the sum of 3 and 5.

Write a program that reads a CSV file and prints the contents line by line using the csv module.