1. Basic Python Knowledge:

- o Explain the difference between Python 2 and Python 3.
- Describe Python's data types, such as integers, strings, lists, dictionaries, and sets.
- o Describe your understanding of variables, data assignment, and variable scope.

2. Control Structures:

- o Write a simple if statement to check a condition.
- o Advice / write a code that uses a for loop to iterate over a list or range.
- o Tell us some example of using while loops.

3. Functions:

- o Define a function that takes parameters and returns a value.
- o Describe about the usage of keyword arguments and default parameter values.
- Request an example of a function that uses the return statement.

4. Data Structures:

- o Tell us about your knowledge of lists and their methods (e.g., append, pop, index).
- Advice about work with dictionaries, including adding, modifying, and accessing keys and values.

5. Exception Handling:

- o Write a code that handles exceptions using try and except blocks.
- Tell us about the purpose of the finally block.

6. File Handling:

- o Provide a code to read from and write to a text file.
- o Explain the difference between reading modes ('r', 'w', 'a').

7. Object-Oriented Programming (OOP):

- Tell us about your understanding about the basics of classes and objects in Python.
- Create a simple class with attributes and methods.

8. Modules and Libraries:

- o Tell us about the importing and using external modules (e.g., math, random).
 - Tell us about the purpose of commonly used libraries like os, sys, or datetime.

9. Basic Algorithms and Problem Solving:

Present a coding problem that involves iterating over data and performing a simple operation (e.g., finding the sum of all even numbers in a list).

10. Coding Exercises:

 Write a Python code that could solve a problem by include tasks like reversing a string, calculating Fibonacci numbers, or implementing a simple data structure.

11. Version Control:

Tell us about your understanding of basic Git commands.