1. Explain Exception handling? What is an Error in Python?

Ans:- An error is an issue in a program that prevents the program from completing its task. In comparison, an exception is a condition that interrupts the normal flow of the program. Both errors and exceptions are a type of runtime error, which means they occur during the execution of a program.

1. What is used to check whether an object o is an instance of class

Ans:- The isinstance () function checks whether an object is an instance of the class mentioned. One can test if an object or variable is an instance of the type or class. If inheritance is present in the program, then the function can be used to check if a specified class is the parent class of an object.

1. Can one block of except statements handle multiple exception?

Ans:- Yes, a single block of except statements in Python can handle multiple exceptions. This feature allows you to handle different types of exceptions using a single block of code.

1. When is the finally block executed?

Ans:- A finally block always executes, regardless of whether an exception is thrown.

1. What happens when „1‟== 1 is executed?

Ans:- When the expression “1” == 1 is executed in Python, it evaluates to False. This is because the equality operator (==) checks for both value and type equality. In this case, you are comparing a string ("1") to an integer (1), and they are of different types.

1. What are oops concepts? Is multiple inheritance supported in java.

Ans:- Object-Oriented Programming (OOP) is a programming paradigm that revolves around the concept of "objects," which are instances of classes. OOP is based on four main principles, often referred to as the core concepts or pillars of OOP:

1. Encapsulation
2. Inheritance
3. Polymorphism
4. Abstraction

* Multiple Inheritance is the process in which a subclass inherits more than one superclass. Java does not support Multiple Inheritance; however, Java interfaces help us achieve Multiple Inheritance of type in Java.

1. What is Instantiation in terms of OOP terminology?

Ans:- In object-oriented programming (OOP), instantiation refers to the process of creating an instance of a class. An instance, also known as an object, is a concrete occurrence of a class, with its own unique attributes and behaviours. When you instantiate a class, you are creating a specific object based on that class's blueprint.

1. How many except statements can a try-except block have? Name Some built-in exception classes:

Ans:- A try-except block in Python can have multiple except clauses to handle different types of exceptions.

There is no strict limit on the number of except statements you can have. You can handle various exceptions in different except blocks based on your requirements.

* Some common built-in exception classes in Python include:

1. ValueError

2. ZeroDivisionError

3. FileNotFoundError

4. KeyError

5. AttributeError

6. RuntimeError

7. SyntaxError

* # Example of try-except block:
* try:

# Code that may raise an exception

result = x / y

* except ValueError:

# Handle ValueError

print("Caught a ValueError")

* except ZeroDivisionError:

# Handle ZeroDivisionError

print("Caught a ZeroDivisionError")

* except Exception as e:

# Handle other exceptions

print(f"Caught an exception: {e}")

1. When will the else part of try-except-else be executed?

Ans:- In a ‘try-except-else’ block in Python, the ‘else’ part is executed if no exceptions are raised in the ‘try’ block. It provides a block of code to be executed when the ‘try’ block completes successfully without encountering any exceptions.