

# Exception handling-

## 1 Assignment Questions

### Assignment

**Q1. What is an Exception in python? Write the difference between Exceptions and Syntax errors.**

**Ans:** Exception is a python object that represents an Error

During the programming Syntax Error comes due to shortage of system resources and it is a critical issue that normal application should not catch, And errors mostly happens at compile-time like syntax error;

Exception is a object that a program should catch and it can be detected at during run time or compile time.

**Q2. What happens when an exception is not handled? Explin with an example.**

**Ans:-**the exception may be handled by an except clause. If the exception is not handled by an except clause, the exception is re-raised after the finally clause has been executed.

Example in ipynb file

**Q3. Which Python statements are used to catch and handle exceptions? Explain with an example.**

**Ans:-**The Try and except block is used to catch and handle exceptions.

Try function is a normal part of the program,

The code uses except statement is a programs response to any exceptions in preceding try clause.

Example in ipynb file

**Q4. Explain with an example:**

**a. try and else**

**b. finally**

**c. raise**

**Ans:-** The try block lets you test a block of code for errors.

The else block lets you execute code when there is no error.

The finally block lets you execute code, regardless of the result of the try- and except blocks.

The Python raise Keyword is used to raise exceptions or errors. The raise keyword raises an error and stops the control flow of the program.

Example In ipynb file.

**Q5. What are Custom Exceptions in python? Why do we need Custom Exceptions? Explain with an example**

**Ans:-** creating a new class that is derived from the built-in Exception class, and add functionality to the custom exception classes like: Adding attributes and properties. Adding methods e.g., log the exception, format the output, etc.

Custom exceptions will add information about project-related problems. That way, we can design our code in a way that combines Python code with the language of the project.

Example file is in ipynb

**Q6. Create a Custom exception class. Use this class to handle an exception.**

**Ans: - answer is in ipynb file**

Note: Create your assignment in Jupyter notebook and upload it to GitHub & share that GitHub repository link through your dashboard. Make sure the repository is public.