File Handling:

Before performing any operations on the file first, we have to open that file. we have to also specify the mode which represents the purpose of file

f = open (filename, mode)

Various Modes:

1. r: open an existing file for read operation
2. w: open an existing file for a write operation. if the file already contains some data then it will be overridden but if the file is not present then it creates the file as well.
3. a: open an existing file for append operation
4. r+: To read and write data into the file. the previous data in the file will be overridden
5. w+: To write and read data. it will override existing data
6. a+: To append and read data from the file. it wont override existing data

Threading:

A thread is a Sequence of Instructions in a program that can be executed independently of the remaing program

Context Switching:

Storing the state of a process or thread and resuming it's execution at a later time is called context switching.

Multithreading:

A model where multiple threads within a process execute independently while sharing the same resources is called as multithreading.

Exception Handling:

Exceptions are raised when the program is syntactically correct, but the code resulted in an error.

Try and Except statements are used to catch and handle the exceptions in Python. statements that can raise exceptions are kept inside the try clause and the statements that handle the exception will be in except

Else cause is used for the try-except block which must be present after all the excep clauses. the code enters the else block only if the try clause does not raise an exception.

Finally is used after the try and except blocks. it excentes even if the try, else blocks are executed. no matter what finally clause will always execute

Custom exception:
we can define our own custom exceptions by creating a new class.