Day 6 :-

Class :- class is a userdefined blueprint from which objects are created.
Class creates a userdefined data structure, which holds its own data members and member functions which can be accessed and used by creating instance of class.
- Classes are created by keyword Class.
- Attributes are the variables of the class.

- Class Object :-
An Object is an instance of the class. a class is a blueprint while instance is a copy of the class with actual values.

- Abstraction
Through the process of abstraction in python, a programmer can hide all the irrelevant data of an application to reduce complexity and increase efficiency
- helps in reducing programming efforts and reduce code complexity.
- It is used to hide unwanted details from user.
- It allows focousing the main concept.

- Encapsulation :-
It describes the idea of wrapping data and the methods that work on data within one unit. It puts restrictions on accessing variables and methods directly and can prevent accidental modification of data.

Inheritance :-

inheritance allows us to define a class that inherits all the methods and properties from another class.

child class is the class that inherits from another class, also called derived class.

String Methods

	Method	Description
1.	Capitalize()	Converts the 1st character of upper case.
2.	Casefold()	Converts String into lowercase.
3.	Centre()	Returns a centered String
4.	Count()	Returns no of times a specified value occurs in string
5.	encode()	Returns a encoded version of String.
6.	endswith()	Returns true if String ends with specified value
7.	find()	Searches the String for a specified Value and returns the position of where it was found
8.	format()	formats specified Values in String.
9.	format map()	formats specified Values in String.
10.	index()	Searches the String for a specified Value and returns the position of where it was found.
11.	isalnum()	Returns true if all char in string are alphnumeric
12.	isalpha()	Returns true if all characters in string are alphabet.
13.	isdigit()	Returns true if all characters in string are digit.
14.	join()	Converts the elements of an iterable into String.
15.	lower()	Converts String into lowercase.
16.	lstrip()	Returns left trim version of a String.
17.	maketrans()	Returns translation table used in translation
18.	partition()	Returns a tuple where a specified Value is replaced with a specified Value. parted.

19.	Replace()	Returns A string where a specified Value is replaced with a specified Value.
20.	rjust()	Returns a right justified version of string
21.	rpartition()	Returns a tuple where a string is parted in 3 parts
23.	rstrip()	Returns a right trim version of String.
24.	Strip()	Returns the trimmed Version of String
25.	Swapcase()	Swap cases, lower case becomes upper case and vice versa.
26.	Title()	Converts the 1st character of ~~String~~ each word to uppercase.
27.	Translate()	Returns a translated String.
28.	upper()	Converts a String to uppercase.
29.	Zfill()	fills the String with a specified number of 0 values ~~at~~ the at the begening.