Assignment 3

1. Given a class named **Patient,** identify what instance methods could be written in this class.

Instance methods of patient are:

* Create a profile of patient or if already created then ask patient id
* Conduct check-up or routine visit
* Provide treatment according to patient diagnosed
* Provide scanning if required
* Provide surgery if required
* If disease is curable with medicine, then give the prescription of required medicines

1. Given a class named **CPU,** identify the public & private instance members.

Public instance member:

* Plugging in pen drive to install software
* Inserting CD to watch movies, play games
* Inserting USB/HDMI cables to interface with other devices
* Plugging in led lights to make CPU look attractive

Private instance member:

* Processing of CPU, as it can do multiple tasks like fetching data, decode the data, execute data, giving output
* Design and configuration of CPU

1. Given a class named **Media,** assume there are 3 objects of this class. Identify the static members of this class.

Objects:

* Print media,
* broadcast media
* social media

static members of media class:

* In print media, once the content is printed on the paper then it cannot be changed
* In broadcast media, they have prepared details of the news which is going to delivered because once they go in the air they cannot be changed

1. Given a class named **Calculator** & its derived classes named **Standard** and **Scientific,**identify the method which can be overridden by the derived classes

The normal calculator and the scientific calculator contain some common methods including:

* Addition ()
* Subtraction ()
* Division ()
* Multiplication ()
* Is Equal ()

These methods can be overridden.

1. Given the classes **Bird, Superman, Aeroplane** and **Missile,**identify the usage of interfaces here.

Interfaces here are:

* The common interfaces for all the class are “flight.”
* Bird and superman can have interfaces like, they both are living things so food, oxygen, shelter.
* Common interfaces between Aeroplane and missile would be fuel, operator.