Explain abstraction for the following example: **Implementation not required**.

You have an object Mobile Phone and have 3 mobile phones as following:-

N 142 (Features:- Calling, SMS)

N 271 (Features:- Calling, SMS, FM Radio, MP3, Camera)

B (Features:-Calling, SMS, FM Radio, MP3, Camera, Video Recording, Reading E-mails)

(Example could be in JAVA or C++)

Abstraction is "To represent the essential feature without representing the background details."

Abstraction lets you focus on what the object does instead of how it does it.

Abstraction provides you a generalized view of your classes or objects by providing relevant information.

Abstraction is the process of hiding the working style of an object, and showing the information of an object in an understandable manner.

Abstraction means putting all the variables and methods in a class that are necessary.

Abstraction is a common thing.

Exercise:

You have an object Mobile Phone and have 3 mobile phones as following:-

N 142 (Features:- Calling, SMS)

N 271 (Features:- Calling, SMS, FM Radio, MP3, Camera)

B (Features:-Calling, SMS, FM Radio, MP3, Camera, Video Recording, Reading E-mails)

The common information for all mobile phones are calling and sms.

abstract class Mobile\_Phone {

    public void Calling();

    public void SMS();

}

public class N\_142: Mobile\_Phone {

}

public class N\_271: Mobile\_Phone {

    public void FMRadio();

    public void MP3();

    public void Camera();

}

public class B: Mobile\_Phone {

    public void FMRadio();

    public void MP3();

    public void Camera();

    public void Video\_Recording();

    public void ReadAndSendEmails();

}