Chapter 11 Polymorphism using interfaces in Java by Munawar

Polymorphism using interfaces

C. Cell phone   I. GPS   I. Camera   I. Media Player

                                        Smart Phone   I=interface

GPS g =new Smart Phone ();   C=class

Smart Phone s=new Smart Phone ();

Implementing an interface forces method implement.

Source Code

```java
import javax.swing.plaf.synth.SynthTextAreaUI;
import java.util.Scanner;
import java.util.Random;

interface Camera{
    void takeSnap();
    void RecordVideo();

    // we can default method define then do not require to used in class
    default void CapturePicture(){
        System.out.println("default Capturing Picture .....");
    }
    private void privateCamera(){
        System.out.println("Private is not accessible in another class or
main ");
    }
}

interface wifi{
    String [] getNetwork();
    void connectToNetwork(String network);
}
class MycellPhone{
```

```java
    void cellNumber(int phoneNumber){
        System.out.println("Calling.... "+phoneNumber);
    }
    void pickCall(){
        System.out.println("Connnecting ....");
    }
}

class SmartPhone extends MycellPhone implements wifi,Camera{
    public  void takeSnap(){
        System.out.println("Taking snap");
    }
    public void RecordVideo(){
        System.out.println("Recording ......");
    }
    public String[] getNetwork(){
        System.out.println("Getting list of Network");
        String[] networkList={"Munawar","Raziq","Kama1122"};
        return networkList;
    }
    public void connectToNetwork(String network){
        System.out.println("Connecting to"+network);
    }
    public void CapturePicture(){
        System.out.println("Please Capture the Picture.....");
    }


}
public class Main {
    public static void main (String [] args) {

        Camera cam=new SmartPhone();
       // cam.getNetwork()  // this is a method of smart phone but use it as
a camera
        cam.RecordVideo();
        // if we create the object of camera class then we cannot access the
methods of class smart phne


        SmartPhone sm=new SmartPhone();
        sm.CapturePicture();
        sm.RecordVideo();
        sm.cellNumber(234);


    }


}
```

Thank You