**Solid Design Principles LSP Activity**

A Mobile specification application is designed like below and existing class in that application are like below

**public** **abstract** **class** Mobile {

**public** **abstract** **void** sendSMS();

**public** **abstract** **void** call();

**public** **abstract** **void** playMusic(String fileName);

**public** **abstract** **void** playVideo(String videoFileName);

}

**public** **class** Ipod **extends** Mobile {

@Override

**public** **void** sendSMS() {

// not applicable

}

@Override

**public** **void** call() {

// nota applicable

}

@Override

**public** **void** playMusic(String fileName) {

System.***out***.println("Playing music "+fileName);

}

@Override

**public** **void** playVideo(String videoFileName) {

// not applicable

}

}

**public** **class** SmartPhone **extends** Mobile{

@Override

**public** **void** sendSMS() {

System.***out***.println("sending sms..");

}

@Override

**public** **void** call() {

System.***out***.println("calling");

}

@Override

**public** **void** playMusic(String fileName) {

System.***out***.println("Playing music "+fileName);

}

@Override

**public** **void** playVideo(String videoFileName) {

System.***out***.println("Playing video "+videoFileName);

}

}

As seen in above class specification mobile is an abstract class specifies mobile features. Mobiles are different types one of them is SmartPhone for smart phones all the given features are applicable so by extending the Mobile class it can implemented. But in Ipod can play music but playVideo(), Call(), SMS() are not applicable.

By reading the above scenario the child class Ipod is not completely replaceable of Mobile class.

**Task 3:** Design the mobile specification app and make code relevant to that class and segregate specific functionality to separate class so that your design will be clean.

**Note:** In the given application solid task where you can find package called

**com.epam.lsp.activity.solution** design your code in that package.