

## QUESTION NO-1

```
package main2;
```

```
public class Product {
```

```
    public String productName;
```

```
    public double productPrice;
```

```
    public Product( String productName,double productPrice){
```

```
        this.productName = productName;
```

```
        this.productPrice = productPrice;
```

```
    }
```

```
    public void printPrice(){
```

```
        System.out.println("Product price" + productPrice);
```

```
    }
```

```
}
```

```
class DiscountedProduct extends Product
```

```
{
```

```
    private double discountAmount;
```

```
    void DiscountedProduct(){};
```

```
    DiscountedProduct(String productName, double productPrice, double discountAmount) {
```

```
        super(productName,productPrice);
```

```
        this.discountAmount = discountAmount;
```

```
    }
```

```
public double getDiscountAmount() {  
    return productPrice-discountAmount;  
}  
  
public void setDiscountAmount(double discountAmount) {  
    this.discountAmount = discountAmount;  
}  
  
@Override  
public void printPrice(){  
    System.out.println("Product price: " + getDiscountAmount());  
}  
}  
  
public class Main2 {  
    public static void main(String[] args) {  
        DiscountedProduct obj;  
        obj = new DiscountedProduct("abc", 100.0, 20.0);  
        obj.printPrice();  
    }  
}
```

#### QUESTION NO-02

```
package testmain;  
  
public class School {  
    public String name;  
    public String code;
```

```

    public void printRank(){
        System.out.println("rank from school");
    }
}

public class PrivateSchool extends School{
    public void giveAward(){
        System.out.println("Give award");
    }
}

public class PublicSchool extends School{
    public void giveScholarship(){
        System.out.println("Give Scholarship");
    }

    @Override
    public void printRank(){
        System.out.println("rank from public school");
    }
}

public class TestMain {
    public static void main(String[] args) {
        PrivateSchool scl1;

        scl1 = new PrivateSchool();

        School scl2 = new PublicSchool();

        School scl3 = new School();

        scl1.giveAward();
    }
}

```

```
scl2.printRank();  
scl3.printRank();  
}  
}
```

#### Output:

Give award  
rank from public school  
rank from school

#### Question No -03

#### Output:

An animal is created  
An animal is created  
A bird is created  
A magpie is created  
Don't know if I can fly!  
Magpie is flying  
Magpie is flying  
Eating....  
Magpie is eating  
Magpie is eating

#### Question No -05

```
package test1;  
  
public class Animal {  
    String color;
```

```
Animal( String c){  
    c = color;  
}  
  
}  
  
public class Bird extends Animal{  
    String name;  
    Bird(String color,String name){  
        super(color);  
        this.name = name;  
    }  
    void fly(){  
        System.out.println("Bird is flying!");  
    }  
    void eat(){  
        System.out.println("Animal is eating");  
    }  
}  
  
public class Test1 {  
    public static void main(String[] args) {  
        Bird b = new Bird("Red", "Donald");  
        System.out.println(b.name);  
        b.eat();  
        b.fly();  
    }  
}
```