Object Oriented Programming

Lab

1)

```java
public class overloadingfunc
{
static int add(int x,int y)
{
return x+y;
}
 static double add(double x, double y)
{
return x+y;
}
public static void main(String[] agr)
{
int a=add(12,5);
double b=add(2.5,8.2);
System.out.println("Integer function is :"+a);
System.out.println("Double  function is :"+b);
}
}
```

Output

```
Microsoft Windows [Version 10.0.15063]
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D:\Java>javac overloadingfunc.java

D:\Java>java overloadingfunc.java
Integer function is :17
Double  function is :10.7

D:\Java>_
```

2)

```
 class shape

{

public void display()

{

System.out.println("this is inside display");

}

}

class circle extends shape{

public void show()

{
```

```java
System.out.println("this is inside show");

}

}

class rectangle extends circle{

public void show2()

{

System.out.println("this is inside show2");

}

}

class multilevel

{

public static void main(String[] agr)

{

rectangle o=new rectangle();

o.display();

o.show();

o.show2();

}

}
```

Output

```
D:\Java>java multilevel
this is inside display
this is inside show
this is inside show2

D:\Java>
```

3)

class shape

{

    public void display()

    {

        System.out.println("This is inside display");

    }

}

class circle extends shape {

    public void show()

    {

        System.out.println("This is inside show");
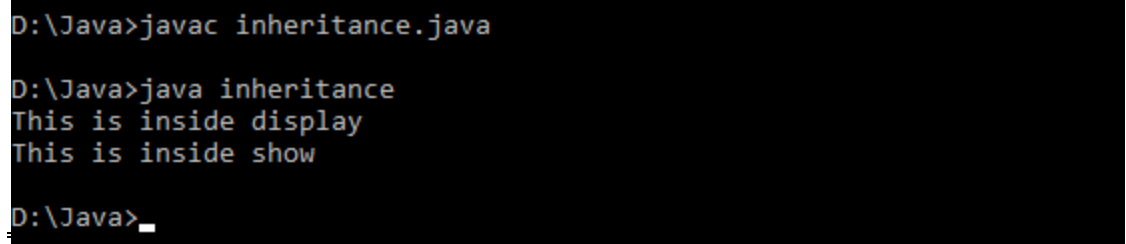
    }

}

class inheritance

```
{
        public static void main (String[] agr)

        {

                circle o=new circle();

                o.display();

                o.show();

        }

}
```

Output

4)

```
public class Arrayobj{

public static void main(String[] args)

{

product[] o=new product[5];

o[0]=new product(12,"Soap");

o[1]=new product(14,"Gel");

o[2]=new product(17,"Handwash");
```
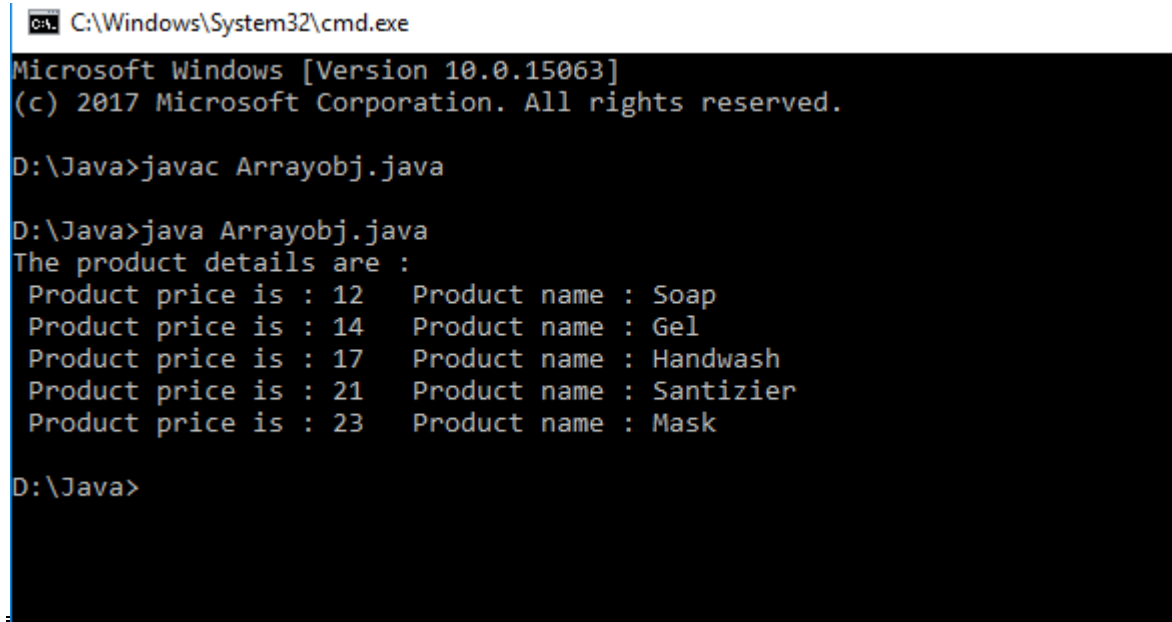
```java
o[3]=new product(21,"Santizier");

o[4]=new product(23,"Mask");

System.out.println("The product details are : ");

int n=5;

for(int i=0;i<n;i++)

{

o[i].display();

}

}

}

class product

{

int pro_price;

String pro_name;

product(int pr,String name)

{

pro_price=pr;

pro_name=name;

}

public void  display(){

System.out.println(" Product price is : "+ pro_price+"   Product name : "+
pro_name);

}
```

}

Output


```
C:\Windows\System32\cmd.exe

Microsoft Windows [Version 10.0.15063]
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D:\Java>javac Arrayobj.java

D:\Java>java Arrayobj.java
The product details are :
 Product price is : 12    Product name : Soap
 Product price is : 14    Product name : Gel
 Product price is : 17    Product name : Handwash
 Product price is : 21    Product name : Santizier
 Product price is : 23    Product name : Mask

D:\Java>
```

5)


```java
public class Sample_String1
{
 public static void main(String[] args)
 {
 String str_Sample = "RockStar";
 System.out.println("Length of String: " + str_Sample.length());
 System.out.println("Character at position 5: " + str_Sample.charAt(5));
 System.out.println("EndsWith character 'r': " + str_Sample.endsWith("r"));
```

```java
    System.out.println("Replace 'Rock' with 'Duke': " + str_Sample.replace("Rock", "Duke"));

}

}
```

Output

```
Select C:\Windows\System32\cmd.exe

Microsoft Windows [Version 10.0.15063]
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D:\Java>javac Sample_String1.java

D:\Java>java Sample_String1.java
Length of String: 8
Character at position 5: t
EndsWith character 'r': true
Replace 'Rock' with 'Duke': DukeStar

D:\Java>
```