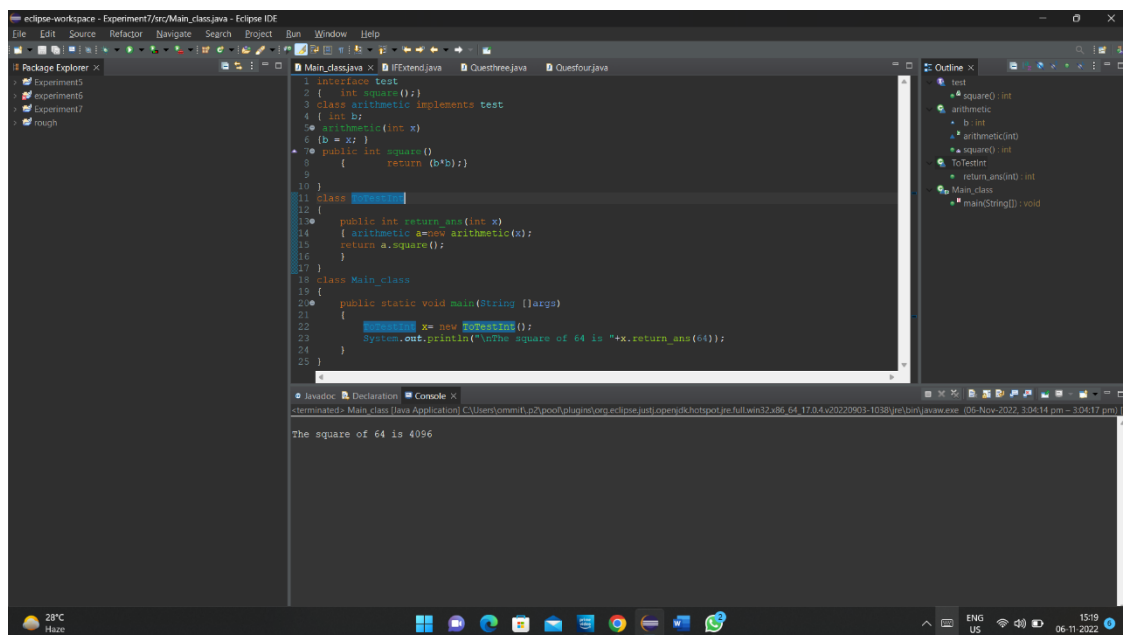


1) Write a program to create interface named test. In this interface the member function is square. Implement this interface in arithmetic class. Create one new class called ToTestInt. In this class use the object of arithmetic class.

CODE:-

```
interface test
{
    int square();
}
class arithmetic implements test
{
    int b;
    arithmetic(int x)
    {
        b = x;
    }
    public int square()
    {
        return (b*b);
    }
}
class ToTestInt
{
    public int return_ans(int x)
    {
        arithmetic a=new arithmetic(x);
        return a.square();
    }
}
class Main_class
{
    public static void main(String []args)
    {
        ToTestInt x= new ToTestInt();
        System.out.println("\nThe square of 64 is "+x.return_ans(64));
    }
}
```

SCREENSHOT:-



2) Write a program to create interface A, in this interface we have two method meth1 and meth2. Implements this interface in another class named MyClass.

CODE:-

```
interface A
{
void meth1();
void meth2();
}
// B now includes meth1() and meth2()—it adds meth3().
interface B extends A
{
void meth3();
}
// This class must implement all of A and B
class MyClass implements B
{
public void meth1 ( )
{
System.out.println("Implement meth1().");
}
public void meth2()
{
System.out.println ("Implement meth2().");
}
public void meth3()
{
System.out.println ("Implement meth()." );
}
}
class IFExtend
{
public static void main(String arg[])
{
MyClass ob = new MyClass();
ob.meth1();
ob.meth2();
ob.meth3();
}
```

SCREENSHORT:-

```

1 interface A
2 {
3 void meth1();
4 void meth2();
5 }
6 // B now includes meth1() and meth2()—it adds meth3().
7 interface B extends A
8 {
9 void meth3();
10 }
11 // This class must implement all of A and B
12 class MyClass implements B
13 {
14 public void meth1 ( )
15 {
16 System.out.println("Implement meth1().");
17 }
18 public void meth2()
19 {
20 System.out.println ("Implement meth2().");
21 }
22 public void meth3()
23 {
24 System.out.println ("Implement meth()." );
25 }
26 }
27
28 class IFExtend
29 {
30 public static void main(String arg[])
31 {
32 MyClass ob = new MyClass();
33 ob.meth1();
34 ob.meth2();
35 ob.meth3();
36 }
37 }

```

Console Output:

```

Implement meth1().
Implement meth2().
Implement meth().

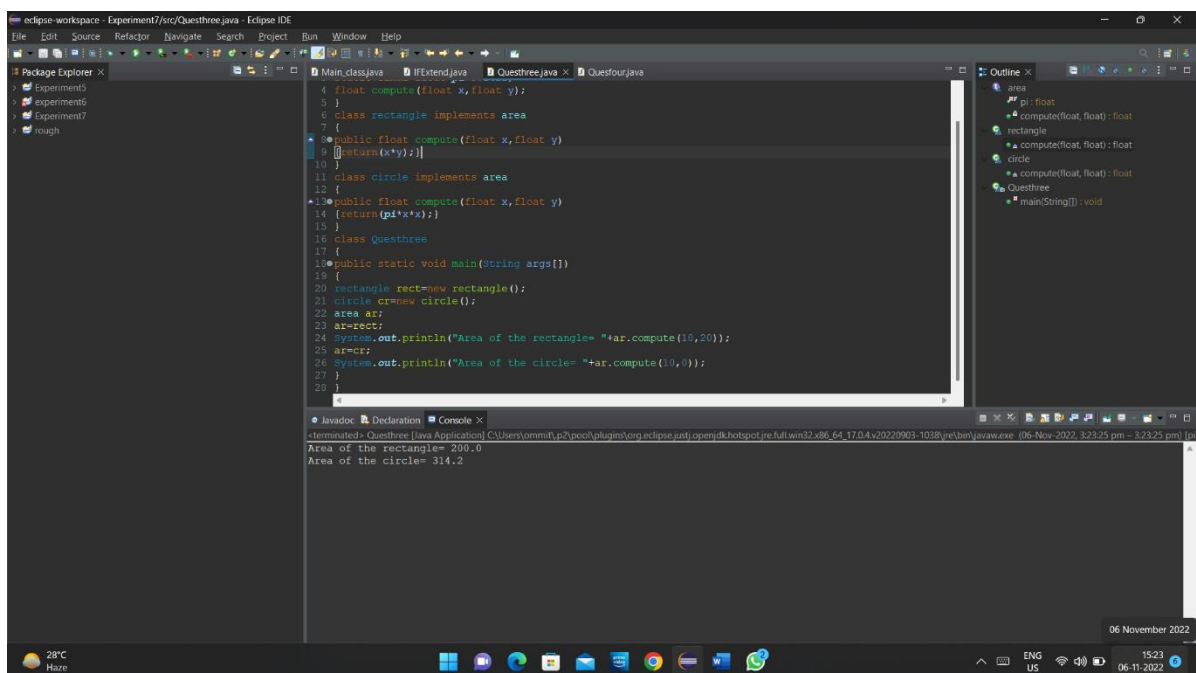
```

3) Write a program in Java to show the usefulness of Interfaces as a place to keep constant value of the program

CODE:-

```
interface area
{
    static final float pi=3.142f;
    float compute(float x,float y);
}
class rectangle implements area
{
    public float compute(float x,float y)
    {return(x*y);}
}
class circle implements area
{
    public float compute(float x,float y)
    {return(pi*x*x);}
}
class Questthree
{
    public static void main(String args[])
    {
        rectangle rect=new rectangle();
        circle cr=new circle();
        area ar;
        ar=rect;
        System.out.println("Area of the rectangle= "+ar.compute(10,20));
        ar=cr;
        System.out.println("Area of the circle= "+ar.compute(10,0));
    }
}
```

SCREENSHORT:-



4) Write a program to create an Interface having two methods division and modules. Create a class, which overrides these methods.

CODE:-

```
interface course
{
void division(int a);
void modules(int b);
}
class stud implements course
{
String name;
int div,mod;
void name(String n)
{ name=n; }
public void division(int a)
{ div=a; }
public void modules(int b)
{ mod=b; }
void disp()
{
System.out.println("Name :"+name);
System.out.println("Division :"+div);
System.out.println("Modules :"+mod);
}
}
//-----main-----
class Quesfour
{
public static void main(String args[])
{ stud s=new stud();
s.name("OM MITTAL");
s.division(5);
s.modules(15);
s.disp();
}
```

SCREENSHORT:-

