9. Develop a JAVA program to raise a custom exception (user defined exception) for DivisionByZero using try, catch, throw and finally.

```
package program;
import java.util.Scanner;
class DivisionByZero extends Exception
{
public DivisionByZero(String message)
{
super(message);
}
}
public class lab9 {
static double divide(int numerater,int denominator) throws DivisionByZero
{
if(denominator==0) throw new DivisionByZero("/byzero");
else
return (double)numerater/denominator;
}
public static void main(String[] args) {
Scanner s=new Scanner(System.in);
System.out.println("enter a value");
int a=s.nextInt();
System.out.println("enter b value");
int b=s.nextInt();
double c=0;
try {
c=divide(a, b);
}
catch(DivisionByZero o)
{
System.out.println("exception handled"+o);
}
finally
{
System.out.println("this will anyway execute in finally block");
}
System.out.println(c);
```

```
System.out.println("this will execute");
}
}
```

7. Develop a JAVA program to create an interface Resizable with methods resizeWidth(int width) and resizeHeight(int height) that allow an object to be resized. Create a class Rectangle that implements theResizable interface and implements the resize methods.

```
package program;
interface Resizable
{
void resizewidth(int width);
void resizeheight(int height);
}
class Rectangle implements Resizable
{
int width,height;
Rectangle(int w,int h)
{
width=w;
height=h;
}
void displayR()
{
System.out.println("Width of rectangle="+width);
System.out.println("height of rectangle="+height);
}
public  void resizewidth(int w)
{
width=w;
}

public void resizeheight(int h)
{
height=h;
}
}
public class lab7 {
```

```
public static void main(String[] args) {
Rectangle r=new Rectangle(7,8);
System.out.println("before resizing");
r.displayR();
r.resizeheight(15);
r.resizewidth(90);
System.out.println("after resizing");
r.displayR();
}

}
```