```
class EDemo1
    public static void main(String args[])
              int a=100/0;
              System.out.println(" A : "+a);
     }
class EDemo2
    public static void main(String args[])
         try
              int a=100/0;
              System.out.println(" A : "+a);
         catch(ArithmeticException ee)
              System.out.println(" Can't Divide by zero ");
     }
class EDemo3
    public static void main(String args[])
         try
              System.out.println(" Connection Opened ");
              int a=100/2;
              System.out.println(" A : "+a);
              int b[]=\{10,20,30,40\};
              System.out.println(" B : "+b[2]);
              System.out.println("\ Connection\ Closed\ ");
```

```
}
            catch(ArithmeticException ee)
                   System.out.println(" Can't Divide by zero");
            catch(ArrayIndexOutOfBoundsException ee)
                   System.out.println(" Array Index Out Of Range");
             }
      }
}
class EDemo4
      public static void main(String args[])
            try
                   System.out.println(" Connection Opened ");
                   int a=100/2;
                   System.out.println(" A : "+a);
                   int b[]=\{10,20,30,40\};
                   System.out.println(" B : "+b[1]);
            catch(ArithmeticException ee)
                   System.out.println(" Can't Divide by zero");
            catch(ArrayIndexOutOfBoundsException ee)
             {
                   System.out.println(" Array Index Out Of Range");
            finally
             {
                   System.out.println(" Connection Closed ");
                   System.out.println("Finally Block");
             }
      }
}
```

```
System.out.println(" Connection Opened \n\n");
      int a=100/2;
      System.out.println(" A : "+a);
      int b[]=\{10,20,30,40\};
      System.out.println(" B : "+b[11]);
      System.out.println("\n\n Connection Closed ");
    }
    catch(Exception ex){
      if(ex instanceof ArithmeticException){
        System.out.println(" Can't Divide by zero");
      }
      if(ex instanceof ArrayIndexOutOfBoundsException){
        System.out.println(" Array Index Out Of Range");
    }
  }
class AgeException extends Exception //user defined Exception
      String getException()
            return "Age Should not > 25";
      }
}
class Registration
      void validation(int x)throws AgeException
```

{

```
if(x>25)
                     throw new AgeException();
              else
                     System.out.println(" Validation Success!");
              }
       }
}
class EDemo5
       public static void main(String args[])
              Registration s1=new Registration();
              //s1.validation(21);
              try
                     s1.validation(14);
              catch(AgeException ee)
              String msg=ee.getException();
                     System.out.println("-----> "+msg);
              }
       }
package exceptionhandling;
import java.util.Scanner;
class AgeException extends Exception
       String getException()
              return "Age Should not > 25";
       }
}
```

```
class Registration
      void validation(int x) throws AgeException
            if(x>25)
          throw new AgeException();
            }
            else
                  System.out.println(" Validation Success!");
            }
      }
#########
class EDemo6
      public static void main(String args[])
            Registration s1 = new Registration();
       //s1.validation(10);
            try
          Scanner s=new Scanner(System.in);
          System.out.print(" Enter the Value
          int x = s.nextInt();
                  s1.validation(x);
            }
            catch(Exception ee)
          if(ee instanceof AgeException){
            AgeException age=(AgeException)ee;
            String msg=age.getException();
            System.out.println("----> "+msg);
```

```
}
           }
      }
}
##########
import java.io.*;
class Sample
      Sample(int x)throws FileNotFoundException
           if(x<20)
                 throw new FileNotFoundException();
            }
           else
                 System.out.println(" Validation Success!");
            }
      }
}
class EDemo6
     public static void main(String args[])
           //new Sample(31);
           try
                 new Sample(22);
           catch(FileNotFoundException ee)
                 System.out.println("Value should not < 20");
```

```
}
}
##########
import java.io.*;
class EDemo7
    public static void main(String args[])
              FileReader fr=new FileReader("EDemo19.java");
     }
#########
import java.io.*;
class EDemo8
    public static void main(String args[])
         try
         {
              FileReader fr=new FileReader("EDemo19.java");
         System.out.println("Success!");
         catch(FileNotFoundException ee)
              System.out.println("File is not available");
         }
     }
##########
class Sample1
    void test(int x)throws ArithmeticException
         if(x<20)
              ArithmeticException ob=new ArithmeticException();
              throw ob;
```

```
}
            else
                  System.out.println(" Validation Success!");
      }
class EDemo9
      public static void main(String args[])
            Sample1 s1=new Sample1();
            s1.test(10);
      }
}
#########
class Sample2
      void test(int x)throws ArithmeticException
            if(x<20)
            {
                  ArithmeticException ob=new ArithmeticException();
                  throw ob;
            }
            else
            {
                  System.out.println(" Validation Success!");
            }
      }
}
class EDemo10
      public static void main(String args[])
            try
            Sample2 s1=new Sample2();
            s1.test(10);
            catch(ArithmeticException ee)
```

```
{
                  System.out.println("Value should not < 20");
            }
      }
##########
import java.util.Scanner;
class AssertionExample
  public static void main( String args[] )
    Scanner input= new Scanner(System.in);
    System.out.print("Enter ur age ");
    int value = input.nextInt();
    assert value>=18:" Not valid";
    System.out.println("value is "+value);
  }
// javac AssertionExample.java
// java -ea AssertionExample
JavaBean
package datas;
public class StudentDetails {
```

```
private int rno;
       private String name;
       private String city;
       public int getRno() {
               return rno;
        }
       public void setRno(int rno) {
               this.rno = rno;
        }
       public String getName() {
               return name;
        }
       public void setName(String name) {
               this.name = name;
        }
       public String getCity() {
               return city;
        }
       public void setCity(String city) {
               this.city = city;
        }
}
```