**Name-Divya Bhosale**

**Roll no-03**

**div-B**

**Experiment no-11**

**Experiment name-Implements programs based on try catch and finally block.**

**Try** We specify the block of code that might give rise to the exception in a special block with a "Try" keyword.

**Catch** When the exception is raised it needs to be caught by the program. This is done using a "catch" keyword. So a catch block follows the try block that raises an exception. The keyword catch should always be used with a try.

**Finally** Sometimes we have an important code in our program that needs to be executed irrespective of whether or not the exception is thrown. This code is placed in a special block starting with the "Finally" keyword. The Finally block follows the Try-catch block.

1.Program using try and catch block.

Input- class EXCEPTION

```
{
   public static void main(String args[])
   {
   System.out.println("main method called");
int a=10,b=0,c;
   try
   {
   c=a/b;
   System.out.println(+c);
   }
   catch(Exception e)
   {
      System.out.println(e);
   }
   System.out.println("main methd found");
```

```
  }
}
```

Output-

```
Microsoft Windows [Version 10.0.22621.3155]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Vaishnavi\Desktop\v\classwork>javac EXCEPTION.java

C:\Users\Vaishnavi\Desktop\v\classwork>java EXCEPTION
main method called
java.lang.ArithmeticException: / by zero
main methd found
```

2.java program using finally keyword. class

```
EXCEPTION
{
  public static void main(String args[])
  {
try
    {
      String s=null;
      System.out.println(s.toUpperCase());
    }
    catch(Exception e)
    {
      System.out.println(e);
    }
finally
{
try
      {
        System.out.println(10/0);
      }
      catch(Exception e)
      {
```

```
            System.out.println(e);
        }
finally
        {
            System.out.println("hey");
        }
    }
  }
}
```

Output-

```
C:\Users\Vaishnavi\Desktop\v\classwork>javac EXCEPTION.java

C:\Users\Vaishnavi\Desktop\v\classwork>java EXCEPTION
java.lang.NullPointerException: Cannot invoke "String.toUpperCase()" because "<local1>" is null
java.lang.ArithmeticException: / by zero
hey
```

3.java program using nested try.

Input- class EXCEPTION

```
{
   public static void main(String args[])
   {
try       {
try
        {
           int arr[]={2,4,67};
           System.out.println(+arr[5]);
        }
        catch(ArrayIndexOutOfBoundsException e)
        {
            System.out.println(e);
        }
        System.out.println(10/0);
    }
    catch(Exception e)
    {
```

```
            System.out.println(e);
        }
    }
}
```

Output-