**Practical No:03**

**Exception**

1. **Write a program to define user defined exception and raise them as per the requirement.**

**Code:**

import java.util.\*;

class AuthenticationException extends RuntimeException

{

AuthenticationException(String msg)

{

super(msg);

}

}

class Uname

{

public static void main(String[] args)

{

String name="Divya",password="div2307";

try

{

Scanner scan=new Scanner(System.in);

System.out.println("Enter Name: ");

String uname=scan.nextLine();

System.out.println("Enter Password: ");

String pass=scan.nextLine();

if(uname.equals(name)&&pass.equals(password))

{

System.out.println("Valid Username and Password");

}

else

{

throw new AuthenticationException("Invalid Username and Password");

}

}

catch(AuthenticationException e)

{

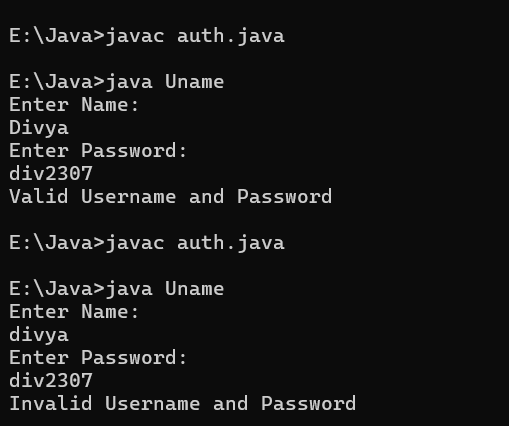
System.out.println(e.getMessage());

}

}

}

**Output:**



**b.Write a program to raise built-in exceptions and raise them as per the requirements.**

**Code:**

class Main\_exp

{

public static void main(String args[])

{

try

{

int a=4/0;

System.out.println(a);

}

catch(ArithmeticException a1)

{

System.out.println(a1.getMessage());

}

try

{

String n= null;

System.out.println(n.length());

}

catch(NullPointerException n1)

{

System.out.println(n1.getMessage());

}

try

{

String s="Mismatched";

int b=Integer.parseInt(s);

System.out.println(b);

}

catch(NumberFormatException e)

{

System.out.println(e.getMessage());

}

try

{

int[] ar={1,2,3,4};

System.out.println(ar[5]);

}

catch(ArrayIndexOutOfBoundsException er)

{

System.out.println(er.getMessage());

}

try

{

String m="DimpShi";

System.out.println(m.charAt(9));

}

catch(StringIndexOutOfBoundsException s)

{

System.out.println(s.getMessage());

}

}

}

**Output:**

