# 19.PROBLEM:

Write a program to show the use of nested try statements that emphasizes the sequence of checking for catch handler statements.

# SOURCECODE:

import java.io.\*;

public class assignment19

{

public static void main(String args[])throws IOException

{

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter the A: ");

String str1=br.readLine();

int x=Integer.parseInt(str1);

System.out.println("Value of X: "+x);

try

{

double c=42/x;

System.out.println("Value of c: "+c);

try

{

if(x==1)

{

int d[]={0};

d[42]=99;

}

}

catch(ArrayIndexOutOfBoundsException e)

{

System.out.println("Exception: "+e);

}

}

catch(ArithmeticException e)

{

System.out.println("Exception: "+e);

}

}

}

# OUTPUT:

Enter the A:

0

Value of X: 0

Exception: java.lang.ArithmeticException: / by zero

Enter the A:

1

Value of X: 1

Value of c: 42.0

Exception: java.lang.ArrayIndexOutOfBoundsException: 42

# DISCUSSION:

1.Here we show a program that DivideByZero‖ that takes two numbers a and b as input, computes a/b, and invokes Arithmetic Exception to generate a message when the denominator is zero.

2.Here at first we give input 0 that generates a arithmeticexception and by giving input 1 it generates ArrayIndexOutOfBoundsException.