**Exceptional Handling(a):Demonstrate exception handling using try with many catch**

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SE/IT/A Batch-B

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import java.util.Scanner;

class exceptional

{

public static void main(String arg[])

{

int w, x,y,z,i,n;

Scanner sc= new Scanner(System.in);

System.out.println("enter three Number");

x=sc.nextInt();

y=sc.nextInt();

z=sc.nextInt();

try

{

w = x/(y-z);

System.out.println ("Result = " + w);

String a = "Abhishek Vasant Girkar";

System.out.println (a);

System.out.println ("which index want to print?");

int p=sc.nextInt();

char c = a.charAt(p);

System.out.println(c);

System.out.println("ENTER ARRAY MEMBERS ");

int b[] = new int[5];

for( i=0; i<5;i++)

{

b[i]=sc.nextInt();

}

System.out.println("ARRAY MEMBERS ARE->\n ");

for( i=0; i<5;i++)

{

System.out.printf("%d\t",b[i]);

}

System.out.println ("\nwhich Array index want to print?");

n =sc.nextInt();

System.out.println (b[n]);

}

catch(ArithmeticException e)

{

System.out.println ("Exception:Can't divide a number by 0");

}

catch(StringIndexOutOfBoundsException e)

{

System.out.println("Exception:StringIndexOutOfBoundsException");

}

catch(ArrayIndexOutOfBoundsException e)

{

System.out.println ("Exception:Array Index is Out Of Bounds");

}

}

}

Output

enter three Number

6 7 8

Result = -6

Abhishek Vasant Girkar

which index want to print?

16

G

ENTER ARRAY MEMBERS

10 20 30 40 50

ARRAY MEMBERS ARE->

10 20 30 40 50

which Array index want to print?

4

50

D:\abhishek>java exceptional

enter three Number

3 3 3

Exception:Can't divide a number by 0

D:\abhishek>java exceptional

enter three Number

3 4 5

Result = -3

Abhishek Vasant Girkar

which index want to print?

24

Exception:StringIndexOutOfBoundsException

D:\abhishek>java exceptional

enter three Number

3 4 5

Result = -3

Abhishek Vasant Girkar

which index want to print?

16

G

ENTER ARRAY MEMBERS

10 20 30 40 50

ARRAY MEMBERS ARE->

10 20 30 40 50

which Array index want to print?

6

Exception:Array Index is Out Of Bounds

**(B) WAP to implement User Defined Exception in Java**

import java.util.Scanner;

class AgeException extends Exception {

public AgeException(String str) {

System.out.println(str); }

}

public class AgeExcDemo {

public static void main(String[] args) {

Scanner s = new Scanner(System.in);

System.out.print("Enter ur age :: ");

int age = s.nextInt();

try {

if(age < 18)

throw new AgeException("Invalid age");

else

System.out.println("Valid age");

}

catch (AgeException a) {

System.out.println(a);

}

}

}

Output

D:\abhishek>javac AgeExcDemo.java

D:\abhishek>java AgeExcDemo

Enter ur age :: 17

Invalid age