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1. Write a java program to handle Exception using try, catch, finally block

   while reading input from commandline and store to integer array.

Program:

```
package Examples;
import java.util.Scanner;
public class Exception {



          public static void main(String[] args) {
              Scanner scanner = new Scanner(System.in);

              try {
                  System.out.print("Enter the size of the array: ");
                  int size = Integer.parseInt(scanner.nextLine());

                  int[] arr = new int[size];

                  System.out.println("Enter the elements of the array:");
                  for (int i = 0; i < size; i++) {
                      System.out.print("Element " + (i + 1) + ": ");
                      arr[i] = Integer.parseInt(scanner.nextLine());
                  }

                  System.out.println("Array elements:");
                  for (int i = 0; i < size; i++) {
                      System.out.println(arr[i]);
                  }
              } catch (NumberFormatException e) {
                  System.out.println("Invalid input! Please enter valid
integers.");
              } finally {
                  scanner.close();
              }
          }
      }
```

Output:

```
Enter the elements of the array:
Element 1: 28
Element 2: 3
Array elements:
28
3
```

(Or)

```
Enter the size of the array: 1
```

```
Enter the elements of the array:
Element 1: Likhitha
Invalid input! Please enter valid integers.
```

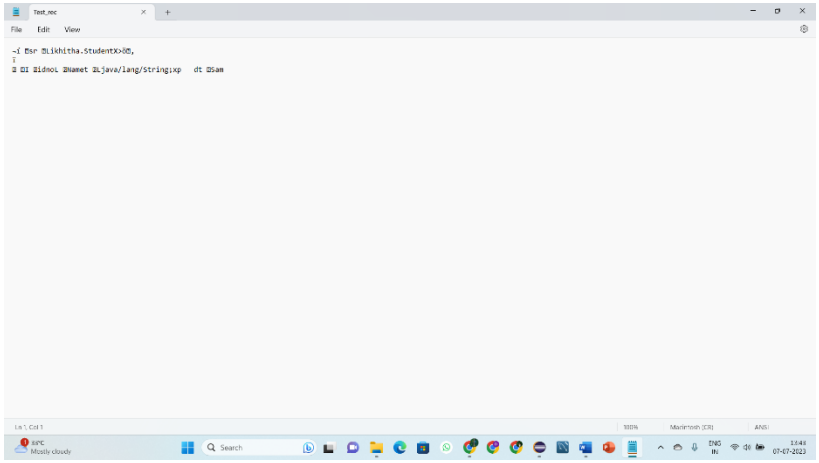
2. Write a java program for Method level exception handling, for writing data to file using objects.

Program:

```
package Likhitha;
import java.io.Serializable;
public class Student implements Serializable {
	int idno;
	String Name;


	public Student(int id, String na)
	{
		idno=id;
		Name=na;
	}
}


package Likhitha;
import java.io.*;

public class FileWriting {



		public void Writedata()throws Exception
		{
			FileOutputStream fout = new
FileOutputStream("d:\\Test_rec.txt");
			ObjectOutputStream out = new ObjectOutputStream(fout);
			 Student s = new Student(100,"Sam");
			 // s.Show();
			 out.writeObject(s);

			System.out.println("data written to file...");


		}
		public static void main(String[] args) throws Exception {

			FileWriting f = new FileWriting();
			f.Writedata();

		}
	}
```

Output:

```
data written to file...
¬í ⍰sr ⍰Likhitha.StudentX>ö⍰,
ï⍰ ⍰I ⍰idnoL ⍰Namet ⍰Ljava/lang/String;xp   dt ⍰Sam
```



3. Write a java program to illustrate, user can check error condition and call the catch block.

Program:

```
package JDBC;
import java.util.*;
public class throwExample {
public static void main(String[] args) {

            Scanner sc = new Scanner(System.in);
            int a,b,c;
            try {
                  System.out.println("Enter 2 integer values ");
                  a=sc.nextInt();
                  b=sc.nextInt();

                  if(b==0)
                  {
                        Exception eobj = new Exception("divisor must be non
zero value ");
                        throw(eobj); //call the catch block manually

                  }
                  else
                  {
                        c=a/b;
                        System.out.println("dvivison "+ c);
                  }

            }
            catch(Exception e)
            {
                  System.out.println(e);

            }
```

```
	}
}
```

Output:

```
Enter 2 integer values
28
3
dvivison 9
```

4. Write a java program to illustrate IO exception

Program:

```
package Examples;
import java.io.*;
//reading input from keyboard and write the data to file in character
stream

public class Input {
	public static void main(String[] args) throws IOException
	{
		DataInputStream dis = new DataInputStream(System.in);


		int roll;
		String name;


		System.out.println("Enter Name ");
		name= dis.readLine();

		System.out.println("Enter Rollno ");
		roll= Integer.parseInt(dis.readLine());



		System.out.println(roll +" "+ name);


	}
}
```

Output:

```
Enter Name
Likhitha
Enter Rollno
28
28 Likhitha
```