```
+----------------------------+
| [1] INPUTMISMATCH EXCEPTION |
+----------------------------+
import java.util.*;

public class Task_1 {
        public static void main(String[] args) {

                Scanner input = new Scanner (System.in);
                boolean check = true;
                do {
                        try {
                                System.out.print("Enter two integers : ");
                                int sum = input.nextInt() + input.nextInt();
                                System.out.println("Sum is  : " +sum);
                                check = false;
                        }
                        catch(InputMismatchException ex) {
                                System.out.println("Invalid input. Try again");
                                input.nextLine();
                        }
                }while(check);
        }

}
+----------------------------+
| [2] INPUTMISMATCH EXCEPTION |
+----------------------------+

import java.util.*;

public class Task_2 {
        public static void main(String[] args) {

                Scanner input = new Scanner (System.in);
                int [] arr = new int [100];
                for(int i =0 ; i < 100 ; i++) {
                        arr[i] = (int)(Math.random()* 100);
                }
                boolean takeInput = true;
                do {
                        try {
                        System.out.print("Enter index number : ");
                        int index = input.nextInt();
                        if(index < 0 || index > 99)
                                throw new ArrayIndexOutOfBoundsException("Index Out
of bounds");

                        for(int i = 0 ; i < 100 ; i++) {
                                if(i == index) {
```

```
                                        System.out.println("Value is : " +arr[i]);
                                        takeInput = false;
                                }
                         }
                  }
                  catch(ArrayIndexOutOfBoundsException ex) {
                          System.out.println("Wrong index. Try again");
                          input.nextLine();
                  }
                  catch(Exception ex1) {
                                System.out.println(ex1.getMessage());
                        }
                }while(takeInput);

        }

}
+---------------------------------+
| [3] BINARY TO DECIMAL EXCEPTION |
+---------------------------------+
import java.util.Scanner;

public class Task_3 {
        public static void main(String[] args) {

                Scanner input = new Scanner (System.in);
                String bin;

                try {
                        System.out.print("Enter any binary number : ");
                        bin = input.next();
                        System.out.println("Decimal value is : " +binToDec(bin));
                }
                catch(NumberFormatException ex) {
                        System.out.println("Invalid input.");
                }

        }
public static int  binToDec(String bin) throws NumberFormatException{
                int dec = 0;
                for(int i =0 , j = bin.length()-1 ; i <bin.length(); i++,j--) {
                        if(bin.charAt(i) != '0' && bin.charAt(i)!= '1')
                                throw new NumberFormatException("Invalid");

                        dec += Integer.parseInt(String.valueOf(bin.charAt(i))) *
Math.pow(2,j);
                }
                return dec;
        }
}
```

```
+-----------+
| [4] FILE  |
+-----------+
package File;
import java.util.*;
import java.io.*;

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

                if(args.length < 1) {
                        System.out.println("Can't find.");
                        System.exit(1);
                }
                File file = new File(args[0]);
                if(!file.exists()) {
                        System.out.println("File  "+args[0]+ " doesn't exists.");
                        System.exit(2);
                }
                int lines = 0;
                int  words = 0;
                int characters = 0;

                try {
                        Scanner input = new Scanner(file);
                        while(input.hasNext()) {
                                String line = input.nextLine();
                                lines++;
                                characters+= line.length();
                                String[] word = line.split(" ");
                                words+= word.length;
                        }
                }
                catch(IOException ex) {
                        System.out.println(ex.getMessage());
                }

                System.out.println("Total characters : " +characters);
                System.out.println("Total words : " +words);
                System.out.println("Total lines : " +lines);
        }

}
+-----------------+
| [5] FILE SCORE  |
+-----------------+
package File;
import java.util.*;
import java.io.*;
```

```
public class ScoresCount {
	public static void main(String[] args) throws FileNotFoundException {

		Scanner input = new Scanner (System.in);
		System.out.println("Enter a file loctaion with scores : ");
		File file = new File(input.nextLine());

		if(!file.exists()) {
			System.out.println("File not found");
			System.exit(1);
		}
		if(file.exists()) {
			System.out.println("file opened.");
		}
		double score = 0;
		double  average = 0;
		int count = 0 ;

		try(Scanner inputFile = new Scanner(file)) {
			while(inputFile.hasNext()) {
				System.out.println("IN FILE " +inputFile.nextInt());
				score+= inputFile.nextInt();
				count++;
			}
		}
		catch(Exception ex) {
			System.out.println("File not found.");
		}
		System.out.println("Total is : " +score);
		System.out.println("Average is : " +score/count);

	}

}
+----------------------+
| [6] FILE READ WRITE  |
+----------------------+
package File;
import java.util.*;
import java.io.*;

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

		File file = new File("Exercise12_15.txt");

		if(!file.exists()) {
		file.createNewFile();
		}
		else
```

```
                        System.out.println("file already exists");
//WRITING
                try(PrintWriter output = new PrintWriter(file)){
                        for(int i = 0; i <100 ; i++) {
                                int ran = (int)(Math.random()* 100);
                                output.print(ran);
                                output.print(" ");
                        }
                        output.close();
                }
//READING
                ArrayList<Integer> list = new ArrayList<>();
                try(Scanner input = new Scanner(file)){
                        while(input.hasNext()) {
                                list.add(input.nextInt());
                        }
                }
                java.util.Collections.sort(list);
                System.out.println("Sorted List : " +list.toString());

        }

}
```