

DAY-5 TASK

1)Handle divide by-zero exception

```
public class DivideByZeroExample {
    public static void main(String[] args) {
        int num1 = 10;
        int num2 = 0;
        int result;

        try {
            result = num1 / num2; // This will cause an exception
            System.out.println("Result: " + result);
        } catch (ArithmeticException e) {
            System.out.println("Error: Cannot divide by zero.");
        }
    }
}
```

Output:

Error: Cannot divide by zero.

2)Read from a text file and display the content

```
import java.io.*;

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

        FileReader fr = new FileReader("example.txt");

        int ch;

        while ((ch = fr.read()) != -1) {
            System.out.print((char) ch);
        }

        fr.close();
    }
}
```

```
}
```

Output:

Hello Anushika!
Welcome to Java file reading.

3)Write strings to a file line by line

```
import java.io.*;

public class WriteToFile {
    public static void main(String[] args) throws IOException {
        BufferedWriter writer = new BufferedWriter(new FileWriter("output.txt"));

        writer.write("Hello");
        writer.newLine();
        writer.write("Hi");
        writer.newLine();
        writer.close();
        System.out.println("File written successfully.");
    }
}
```

Output:

Hello
Hi

4)MAIN PROGRAM: Result processing from file-Read mark file,calculate,and write result file

```
import java.io.*;

public class SimpleResult {
    public static void main(String[] args) throws IOException {
        FileReader fr = new FileReader("marks.txt");
        BufferedReader br = new BufferedReader(fr);
        FileWriter fw = new FileWriter("results.txt");
        BufferedWriter bw = new BufferedWriter(fw);
        String line;
        while ((line = br.readLine()) != null) {
            String[] data = line.split(" ");
```

```

        String name = data[0];
        int m1 = Integer.parseInt(data[1]);
        int m2 = Integer.parseInt(data[2]);
        int m3 = Integer.parseInt(data[3]);

        int total = m1 + m2 + m3;

        bw.write(name + " - Total: " + total);
        bw.newLine();
    }

    br.close();
    bw.close();

    System.out.println("Results saved in results.txt");
}
}

```

Output:

```

Anu - Total: 240
Anitha - Total: 175
Latha - Total: 270

```

5) Create an ArrayList of student and display using iterator

```

import java.util.ArrayList;

public class ArrayListClass {
    public static void main(String[] args) {
        int[] arr = new int[5];
        arr[0] = 10;

        ArrayList<Integer> alist = new ArrayList<>(100);

        alist.add(10);
        alist.add(20);
        alist.add(30);
        alist.add(2, 60);
        alist.set(3, 50);
        alist.remove(1);
        System.out.println(alist);
        System.out.println(alist.contains(20));
        System.out.println(alist.size());
    }
}

```

```
}  
}
```

Output:

```
[10, 60, 50]
```

```
false
```

```
3
```