# Exception handling.

### 1.Try-Catch-Finally

```
public class TryCatch {
  public static void main(String[] args) {
    try {
      int[] myNumbers = {1, 2, 3};
      System.out.println(myNumbers[10]);
    } catch (Exception e) {
      System.out.println("Something went wrong.");
    } finally {
      System.out.println("The 'try catch' is finished.");
    }
}
```

#### Output:

```
Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.

C:\Users\gauta\OneDrive\Desktop\Temp\Ai-04>javac TryCatch.java

C:\Users\gauta\OneDrive\Desktop\Temp\Ai-04>java TryCatch
Something went wrong.
The 'try catch' is finished.

C:\Users\gauta\OneDrive\Desktop\Temp\Ai-04>
```

### 2.Throw

```
class UserDefinedException extends Exception {
  public UserDefinedException(String str) {
    super(str);
  }
}
public class Throw {
  public static void main(String args[]) {
    try {
       throw new UserDefinedException("This is a user-defined exception");
    } catch (UserDefinedException ude) {
       System.out.println("Caught the exception");
       System.out.println(ude.getMessage());
    }
  }
}
Output:
```

```
Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.

C:\Users\gauta\OneDrive\Desktop\Temp\Ai-04\Temp>javac Throw.java

C:\Users\gauta\OneDrive\Desktop\Temp\Ai-04\Temp>java Throw

Caught the exception

This is a user-defined exception

C:\Users\gauta\OneDrive\Desktop\Temp\Ai-04\Temp>
```

### 3.Throws

```
import java.io.IOException;

class M {
    void method() throws IOException {
        throw new IOException("device error");
    }
}

public class Throws{
    public static void main(String args[]) {
        try {
            M m = new M();
            m.method();
        } catch (Exception e) {
```

```
System.out.println("exception handled");
}

System.out.println("normal flow...");
}
```

## Output:

```
Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.

C:\Users\gauta\OneDrive\Desktop\Temp\Ai-04\Temp>javac Throws.java

C:\Users\gauta\OneDrive\Desktop\Temp\Ai-04\Temp>java Throws
exception handled
normal flow...

C:\Users\gauta\OneDrive\Desktop\Temp\Ai-04\Temp>
```