

Chapter 14 Errors & Exception in Java by Munawar

No matter how smart we are, error are our constant companies with practice, we keep getting better at finding & correcting them.

There are three types of errors in Java.

1. Syntax errors
2. Logical errors
3. Runtime errors----- > Also called Exception

Syntax Errors

When compiler finds something wrong with our program, it throw a syntax errors.

Int a=20 ----- > No semicolon, syntax error

d =a+100 ----- >variable not declared, syntax error

Logical errors

A logical error or a bug occurs when a program compiles and error but does not wrong thing.

- Message delivered wrongly.
- Wrong time of chats being displayed.
- Incorrect redirects

Runtime errors

Java may sometimes encounter an errors while the program is running. There are also called exception.

There are encountered due to circumstance like bad input and or resource Constraints Ex. User supplies 'M'+ 4 to a program which adds =numbers.

Syntax errors and logical errors are encountered by the programmer whereas Runtime errors are encountered by the users.

Source Code

```
import javax.swing.plaf.synth.SynthTextAreaUI;
import java.util.Scanner;
import java.util.Random;

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

        // syntax error
        //     int a=5
        //     d=100; // error produce because d is not declared

        int a=10;
        String m="Munawar";
        int c=a+m;
        System.out.println(a+m);

    }
}
```

Thank You