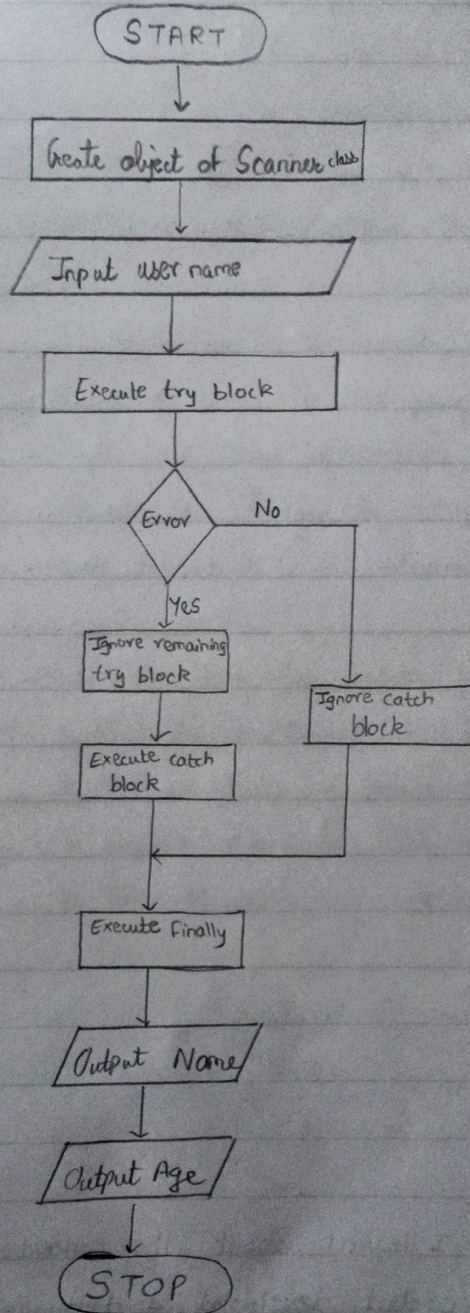


Practical No. 11

Aim : Create , debug and run java programs based on exception handling.

Flowchart :



Aim : Create, debug and execute java programs based on exception handling.

Theory :

What is exception handling?

→ Exception handling is one of the powerful mechanism to handle ~~run~~ the runtime errors so that the normal flow of the application can be maintained.

- An exception is a ~~conditi~~ condition that is caused by a run-time error in the program.
- When the Java interpreter encounters an error such as dividing an integer by zero, it creates an Exception object and throws it (i.e. informs us that an error has occurred).

• What tasks does the error handling code perform :

-
1. Find the problem (Hit the exception)
 2. Inform that an error has occurred (Throw the exception).
 3. Receive the error information (Catch the exception).
 4. Take ~~th~~ corrective actions (Handle the exception).

• What are the types of exception?

-
- i) Checked Exception
 - ii) Unchecked Exception

1) Checked Exception :

These exceptions are explicitly handled in the code itself with the help of try-catch

block. Checked exceptions are extended from the `java.lang.Exception` class.

2) Unchecked Exceptions :

These exceptions are not essentially handled in the program code; instead the JVM handles such exceptions.

- Unchecked exceptions are extended from the `java.lang.RuntimeException`.

• Syntax :

```
try {
```

```
    statement(s);
```

```
} catch (Exception e) {
```

```
    statement(s);
```

```
} catch
```

```
    finally {
```

```
        statement(s);
```

```
}
```


Conclusion:

Hence, I learnt about the concept of exception handling. I also created, debugged and executed java programs based on exception handling.