



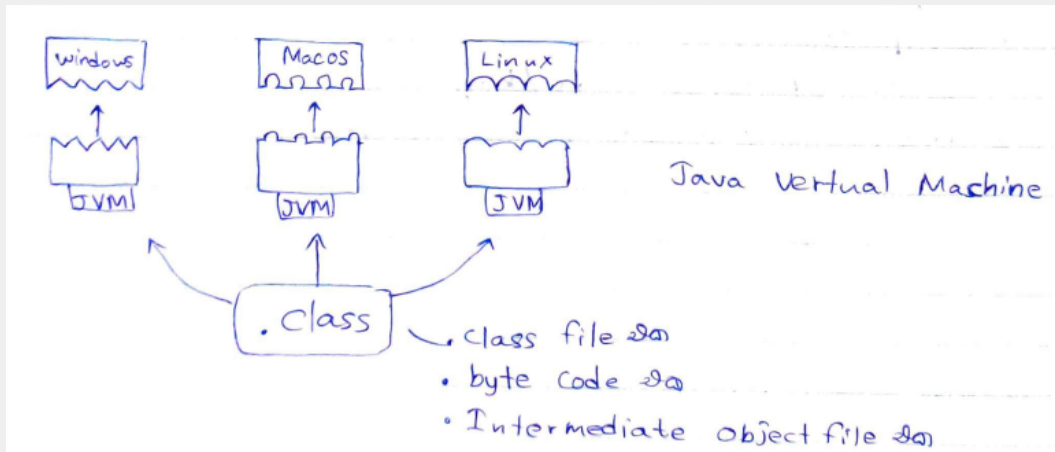
- Files වර්ග 2 i,
 1. Programmes
 2. Documents
- Programme/Software/App එකක් යනු;
Specific task එකක් කරගන්න
Machine එකට දිවු
Instruction set එකක්.
- programme වලින් තමයි Documents හඳුන්නේ.

Java Platform Independency

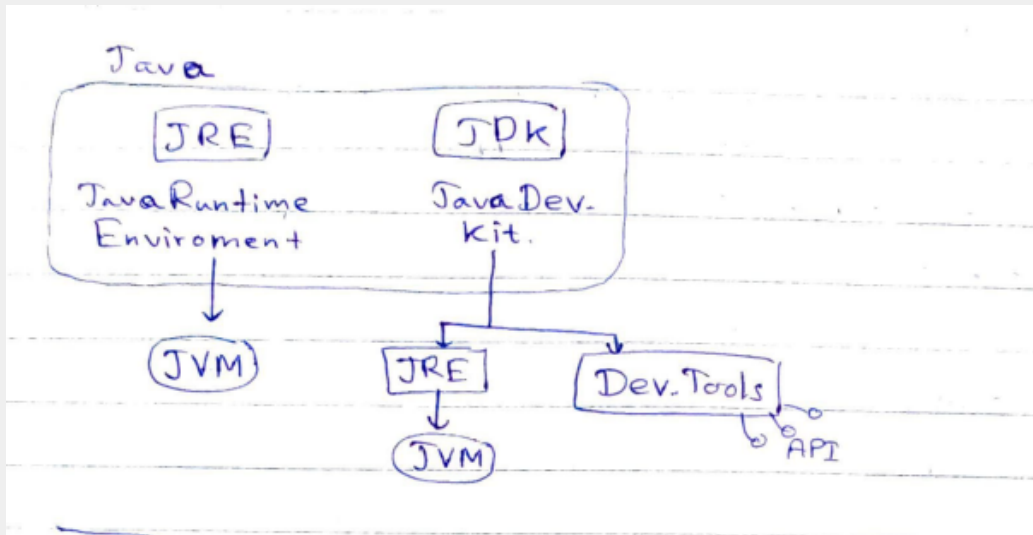
- **Java Language එක Platform Independent**
එකම bytecode එක multiple platforms වල run කරන්න සුදුවන
* Java achieves this using JVM and Byte Code.
- **JVM is platform dependent.**
හාවිතා කරන OS එක අනුව JVM එක වෙනස් වෙන නිසා.
(OS එකට specific විදියට programme එක හඳුන්න)
- **So Java software is platform dependent.**
වෙනස් OS වල නියමේනම වෙනස් JVM නිසා.

Bytecode

- Bytecode benefits (Java platform independency)

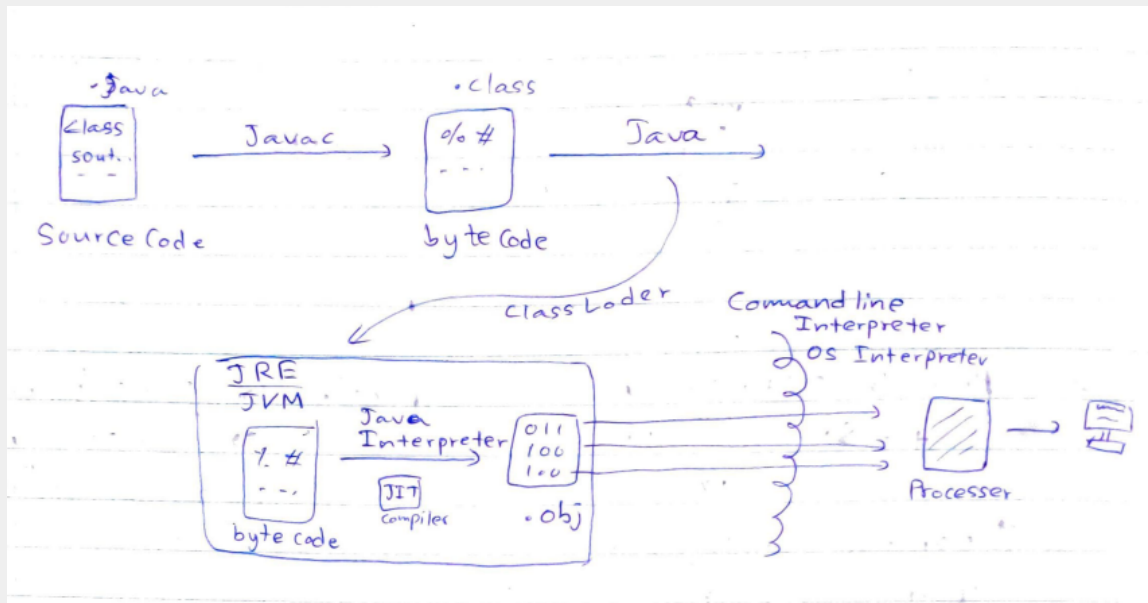


- JRE , JDK , JVM

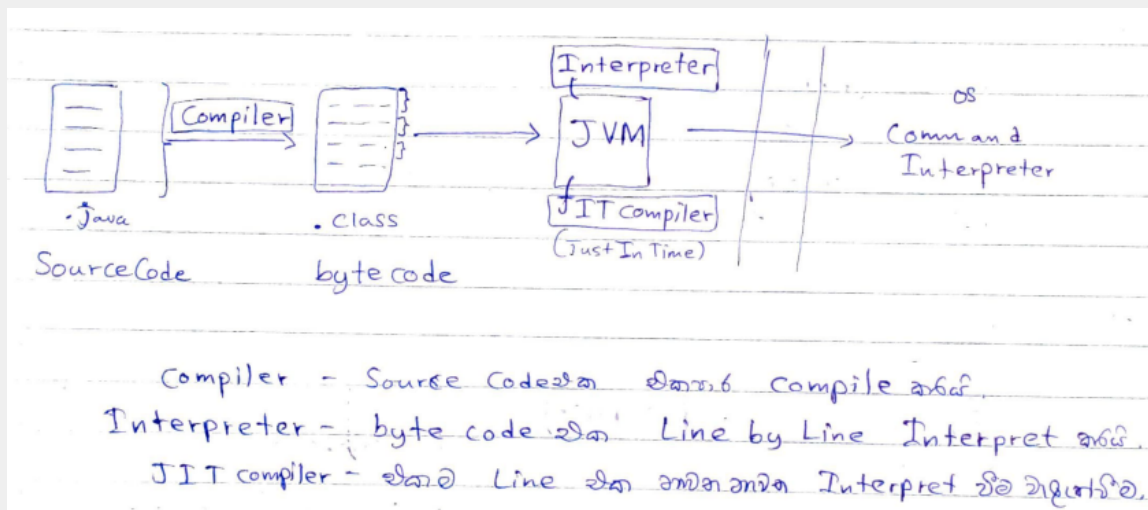


- Dev tools wala compiler inno

- javac , java commands



- Compiler , Java Interpreter, JIT(Just in time) Compiler



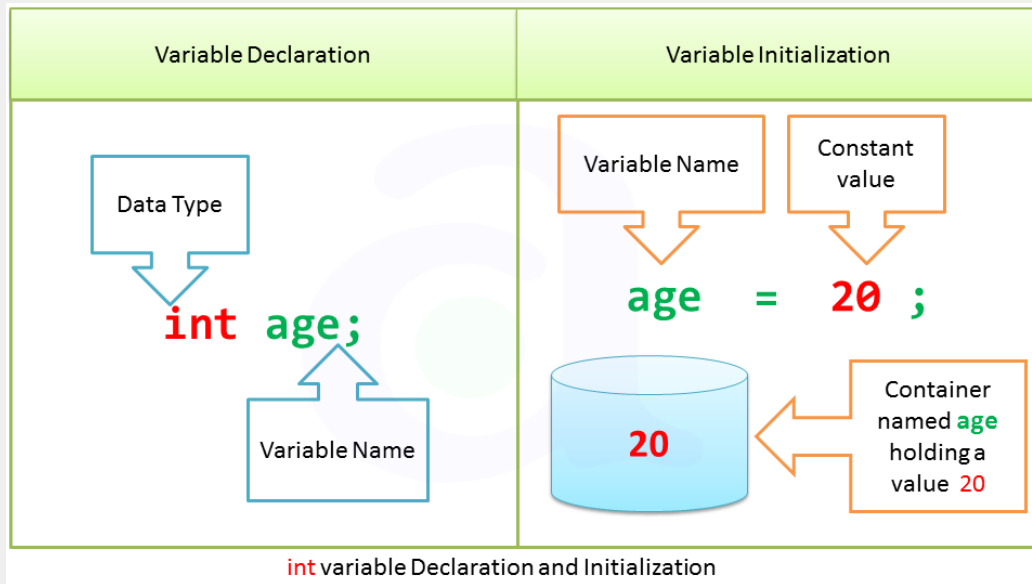
- Main method

Starting point of java application

• What is variable ?

- Data එකක්,
- temporary store කරල තියාගන්න,
- RAM එකේ වෙන්නෙ කරගන්න,
- memory location එකක්

Variable Declaration, Initialization



• String Concat

* $\text{println}(25 + 75 + "100")$

$\text{+} \rightarrow 100 + "100"$

$"100100"$

↑ 2න් 1ක String එකිනෙකා ඔස්සේ String විවිධ String Concat වේ.

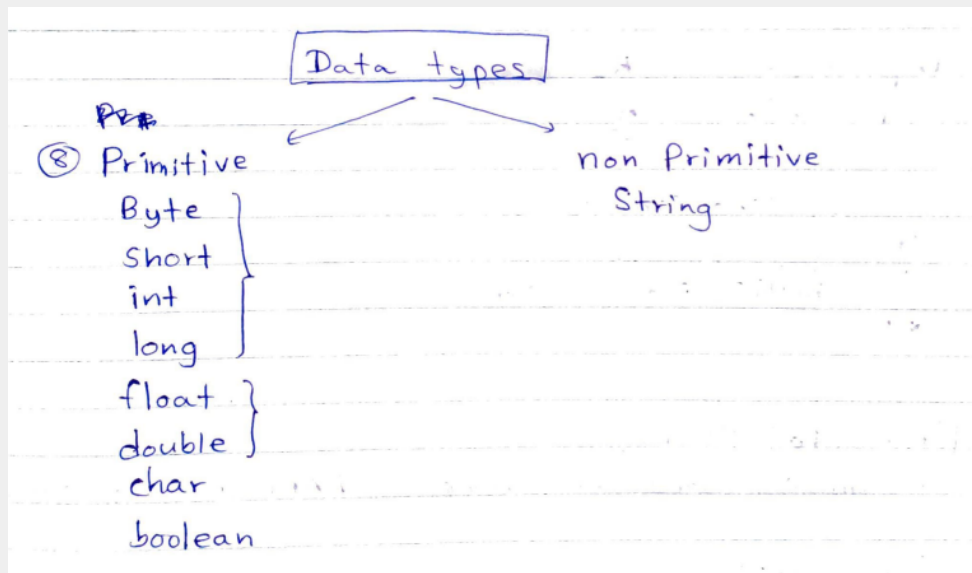
$\text{println}("50" + 25 + 20 + "100")$

$"5025" + 20 + "100"$

$"502520" + "100"$

$"502520100"$

- Data types



- Java literals

Sout එකේ ඇතුළේ දන්න පුළුවන් ඕනම එකක්.

1. Integer Literals
2. Floating point Literals
3. String Literals
4. Character Literals
5. Boolean Literals

- Special characters

(\←backslash)

Escape Sequences	
Escape Sequence	Description
\t	Insert a tab in the text at this point.
\b	Insert a backspace in the text at this point.
\n	Insert a newline in the text at this point.
\r	Insert a carriage return in the text at this point.
\f	Insert a formfeed in the text at this point.
\'	Insert a single quote character in the text at this point.
\"	Insert a double quote character in the text at this point.
\\	Insert a backslash character in the text at this point.

- Scanner

```
import java.util.Scanner; //Import Scanner in java

class classname{
    public void methodname(){

        Scanner s_name = new Scanner(System.in); //Scanner declaration

        //Use Scanner object to take input
        int val1    = s_name.nextInt();           //int
        float val2  = s_name.nextFloat();         //float
        double val3 = s_name.nextDouble();        //double
        String name = s_name.nextLine();          //string
        char ch     = s_name.nextLine().charAt(0); //character
    }
}
```