## PRACTICUM

- **Practicum 1 - Retrieve your computer's IP automatically**

  ➢ Create the program below, save it with the name getIP.java

```java
import java.net.*;

public class getIP {
    public static void main(String args[]) throws Exception {
    InetAddress host = null;
    host = InetAddress.getLocalHost();
    byte ip[] = host.getAddress();

    for (int i=0; i<ip.length; i++) {
        if (i > 0) {
            System.out.print(".");
        }
        System.out.print(ip[i] & 0xff);
    }
    System.out.println();
    }
}
```

| | |
|---|---|
| *import java.net.*;* | This line imports the necessary classes from the java.net package, including the InetAddress class, which is used to represent IP addresses. |
| *host = InetAddress.getLocalHost();* | This line retrieves the IP address of the local host and assigns it to the "host" variable. |
| *byte ip[] = host.getAddress();* | This line retrieves the IP address as an array of bytes and assigns it to the "ip" variable. |
| *for (int i=0; i<ip.length; i++) {* | This line starts a for loop that iterates over each byte in the "ip" array. |
| *if (i > 0) { System.out.print("."); }* | This conditional statement checks if it is not the first byte in the IP address and prints a dot (".") as a separator before printing the byte. |
| *System.out.print(ip[i] & 0xff);* | This line prints the value of the current byte in the IP address. The bitwise AND operation with 0xff is used to ensure that the byte is treated as an unsigned value. |

Compile the above program, run it and observe the results

```
javac getIP.java
java getIP
```