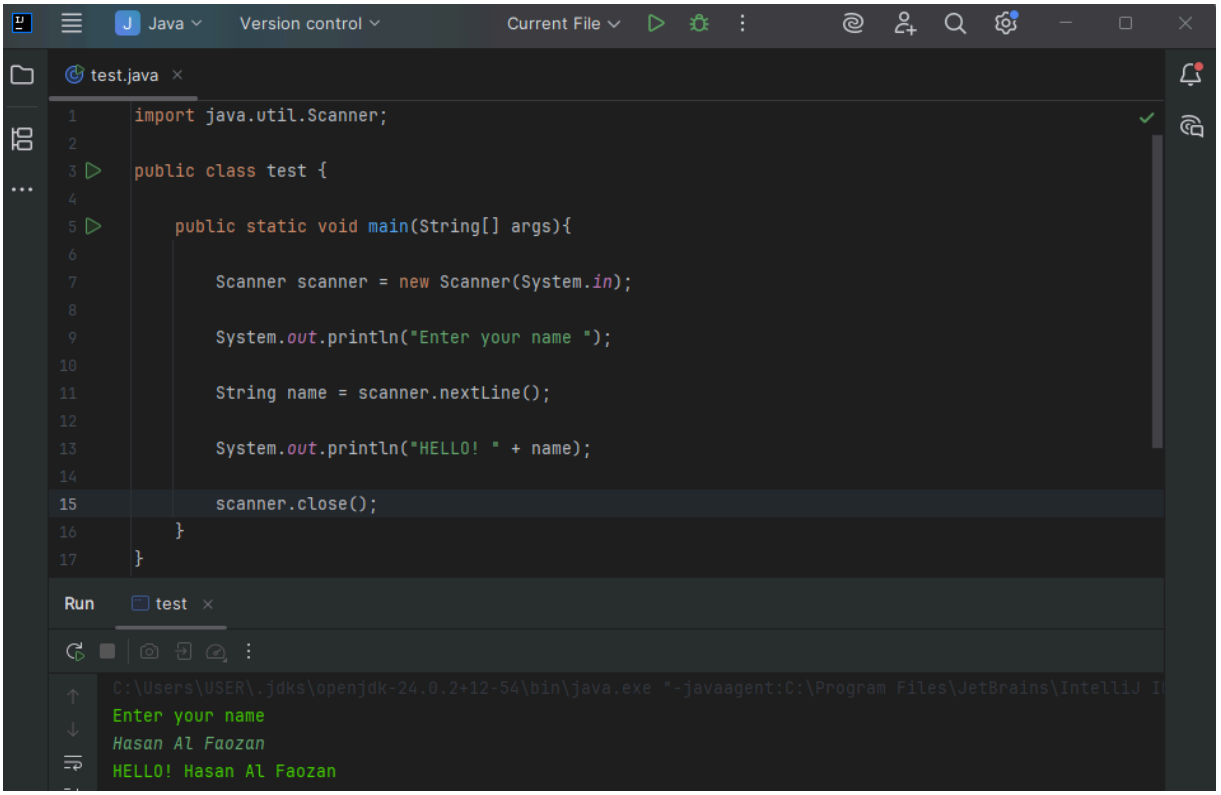
CSE 2340 - SD1 Lab Report - 1

Roll: **C243046** Section: **3BM**

- **The Steps I followed to Setup Java IDE on my pc:**

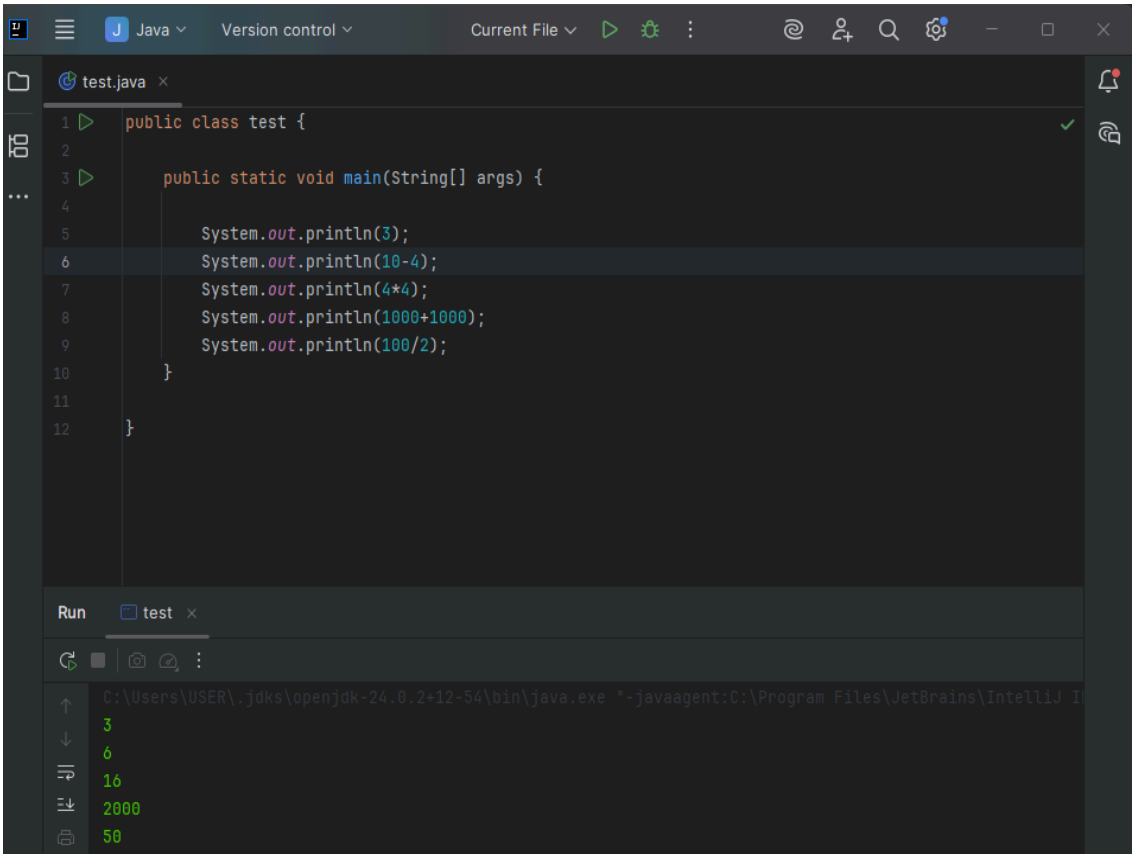
1) Installing Java Development Kit (JDK).
2) Downloading and Installing the IDE (intellij idea community edition).
3) Configuring the IDE:
    a) Opening IntelliJ.
    b) Going to File > Project Structure > SDKs.
    c) Clicking + and add the JDK path.
    d) Under Project, setting the default Project SDK and language level.

- **Running a program that takes my name as input and prints it on the console**.



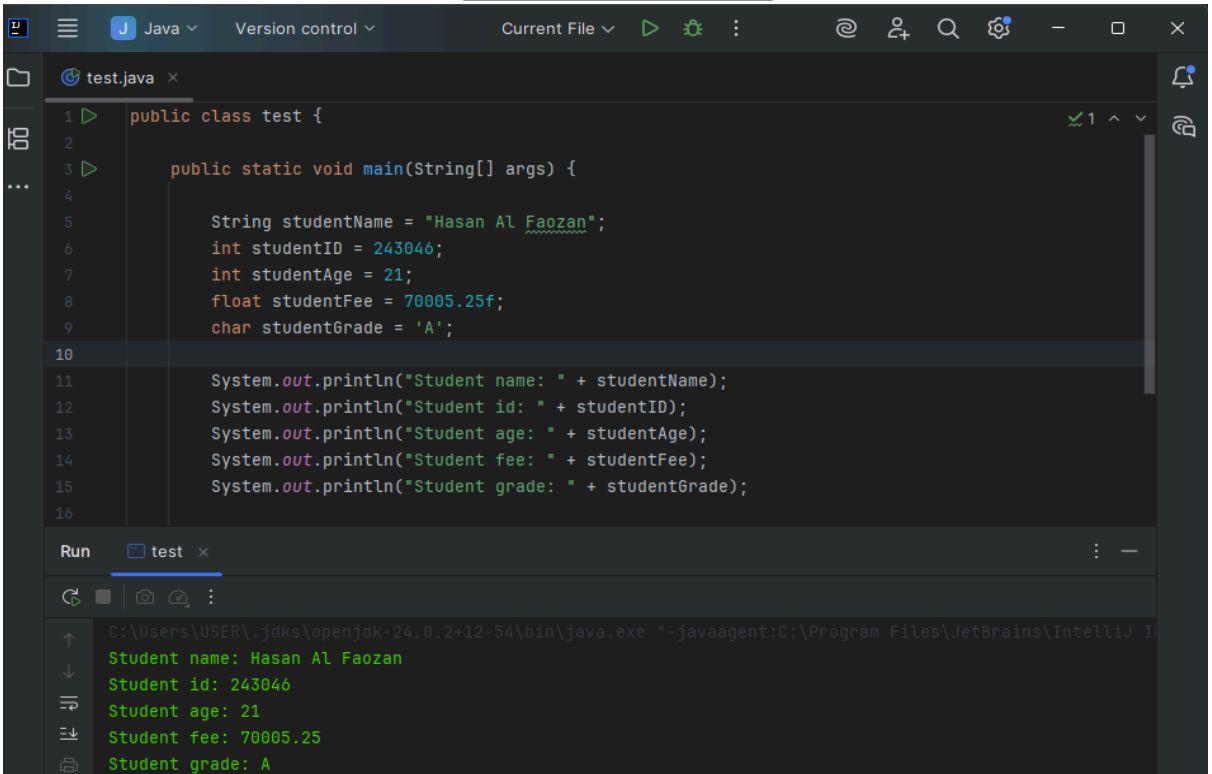
- **Running at least one program for each of the topics listed from the W3Schools blog.**

1. Java output/print:



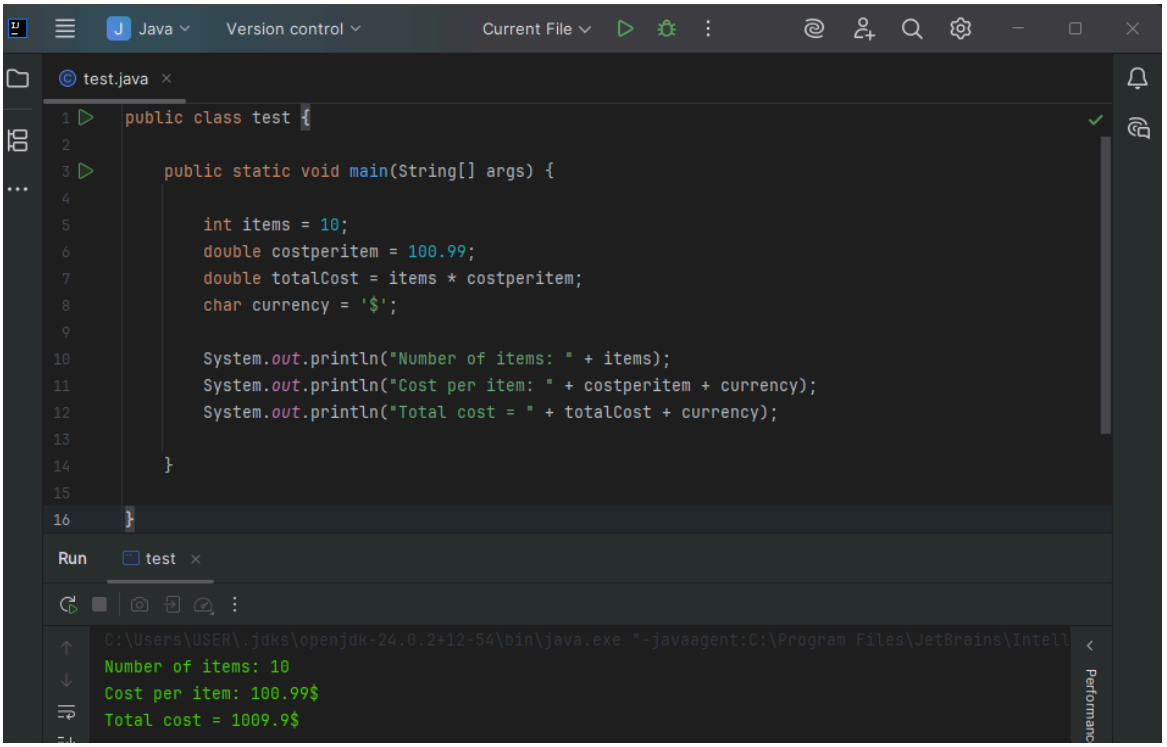
☑ ***This code just gives output.***

2. Java variables:



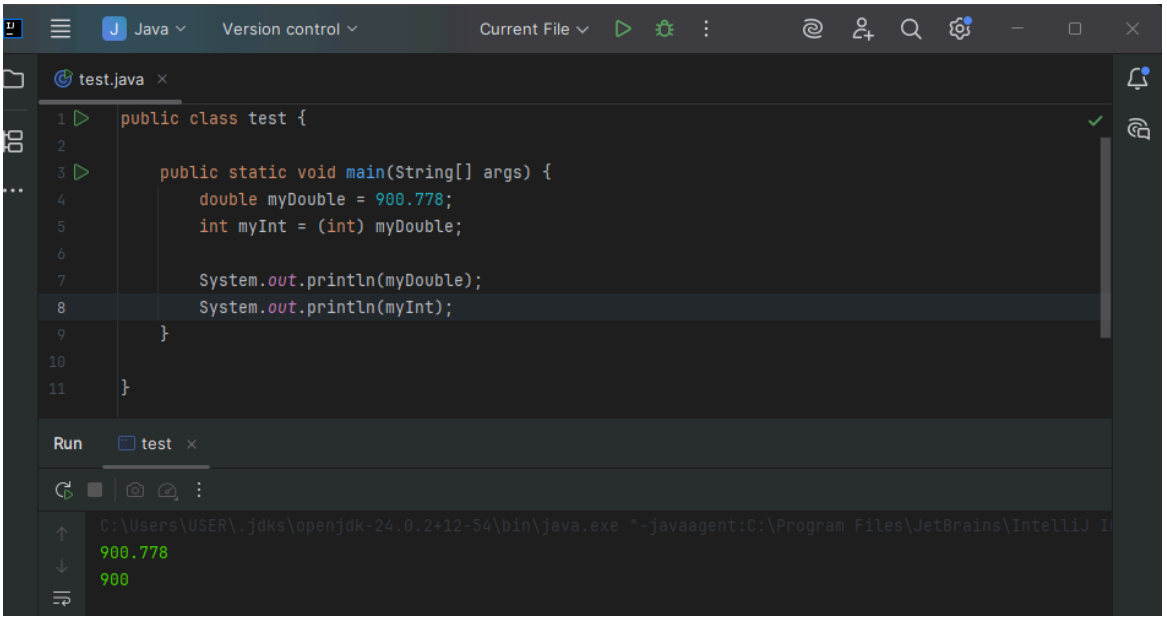
☑ ***This code shows basic Java variables use.***

3. Java Data Types:



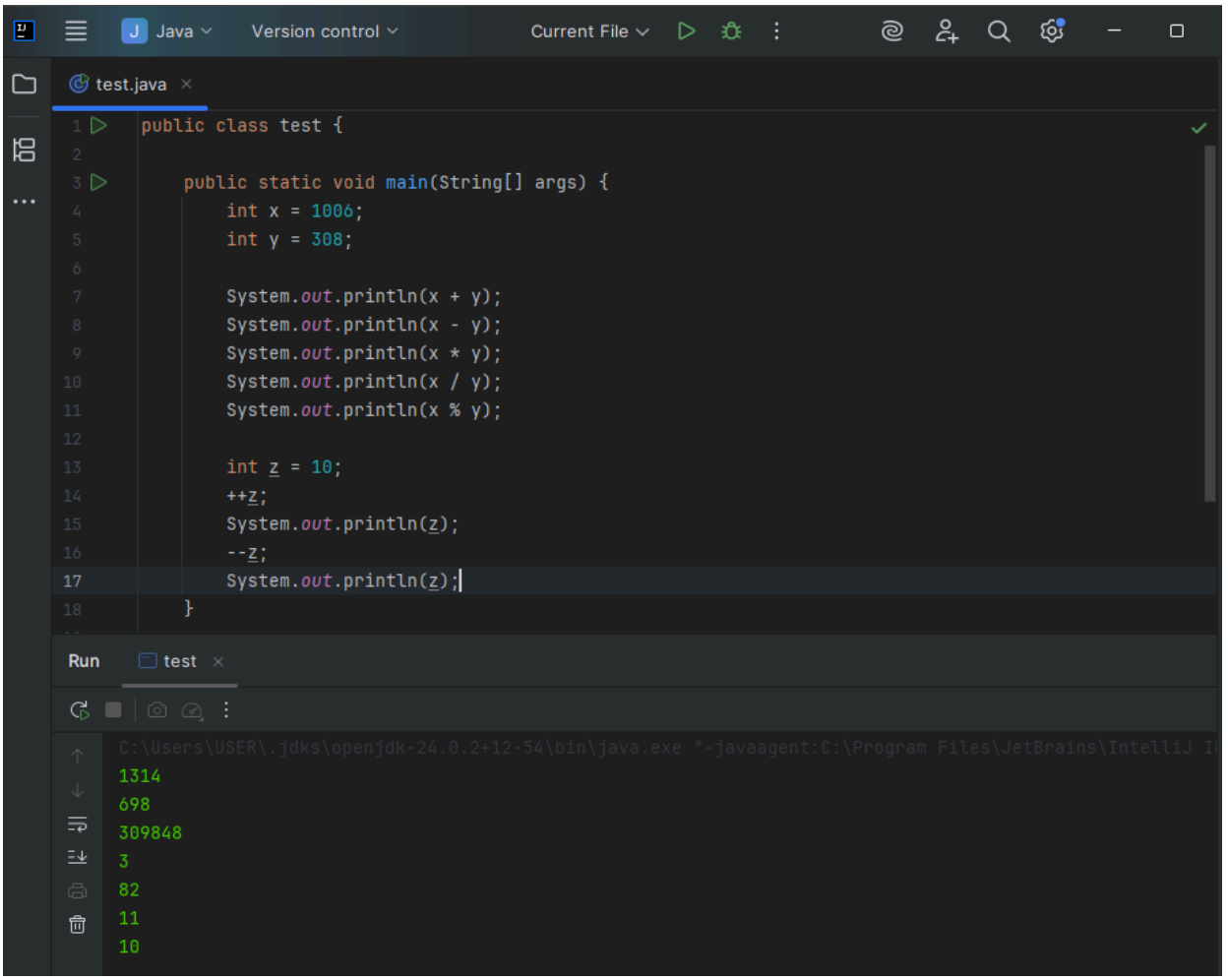
☑ ***This code shows Java Data Types.***

4. Java Type Casting:



☑ ***This code shows basic Java Type Casting where we can change a data type to another data type***

5. Java Operators:

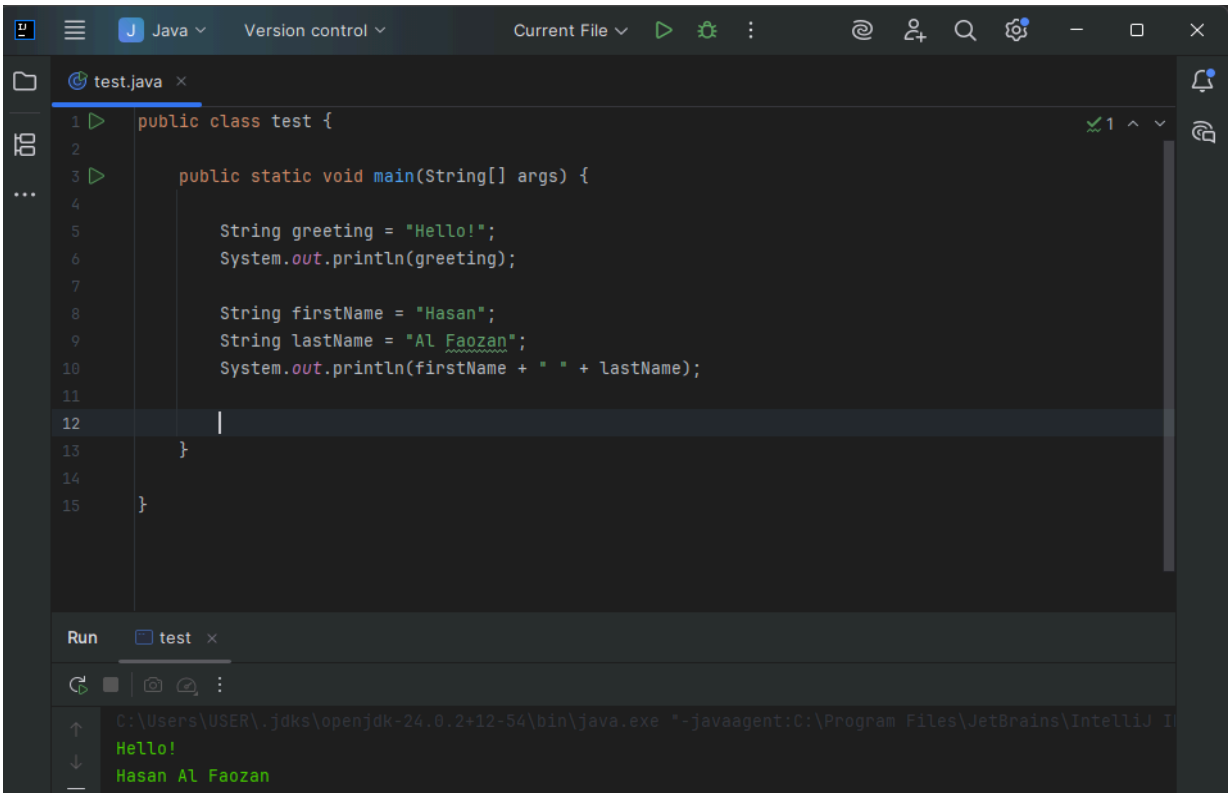


```java
public class test {

    public static void main(String[] args) {
        int x = 1006;
        int y = 308;

        System.out.println(x + y);
        System.out.println(x - y);
        System.out.println(x * y);
        System.out.println(x / y);
        System.out.println(x % y);

        int z = 10;
        ++z;
        System.out.println(z);
        --z;
        System.out.println(z);
    }
```

```
C:\Users\USER\.jdks\openjdk-24.0.2+12-54\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ I
1314
698
309848
3
82
11
10
```

☑ ***This simple code shows all the Java Operators and their use.*** .

6. Java String:

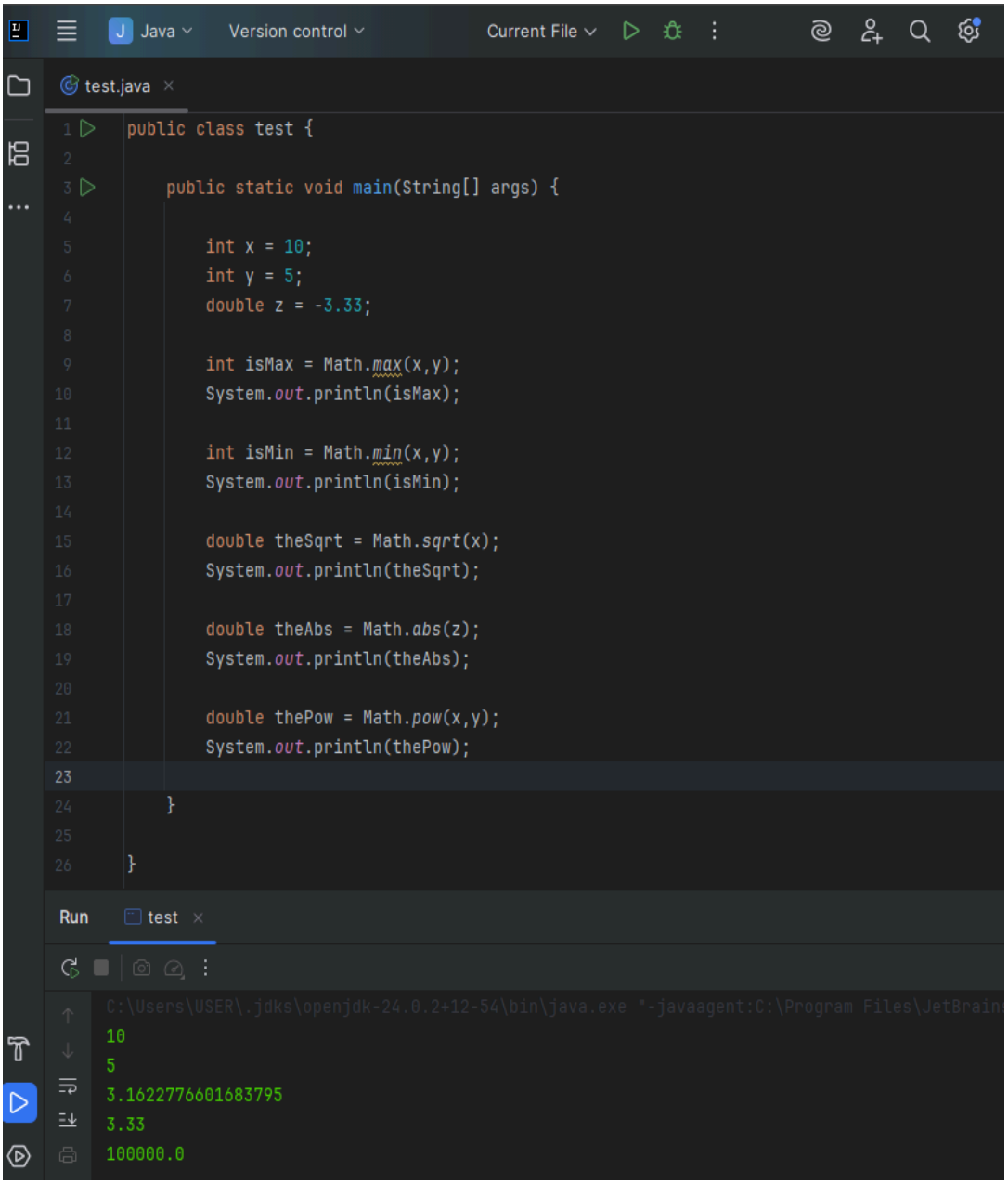


```java
public class test {

    public static void main(String[] args) {

        String greeting = "Hello!";
        System.out.println(greeting);

        String firstName = "Hasan";
        String lastName = "Al Faozan";
        System.out.println(firstName + " " + lastName);

    }

}
```

```
C:\Users\USER\.jdks\openjdk-24.0.2+12-54\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ I
Hello!
Hasan Al Faozan
```

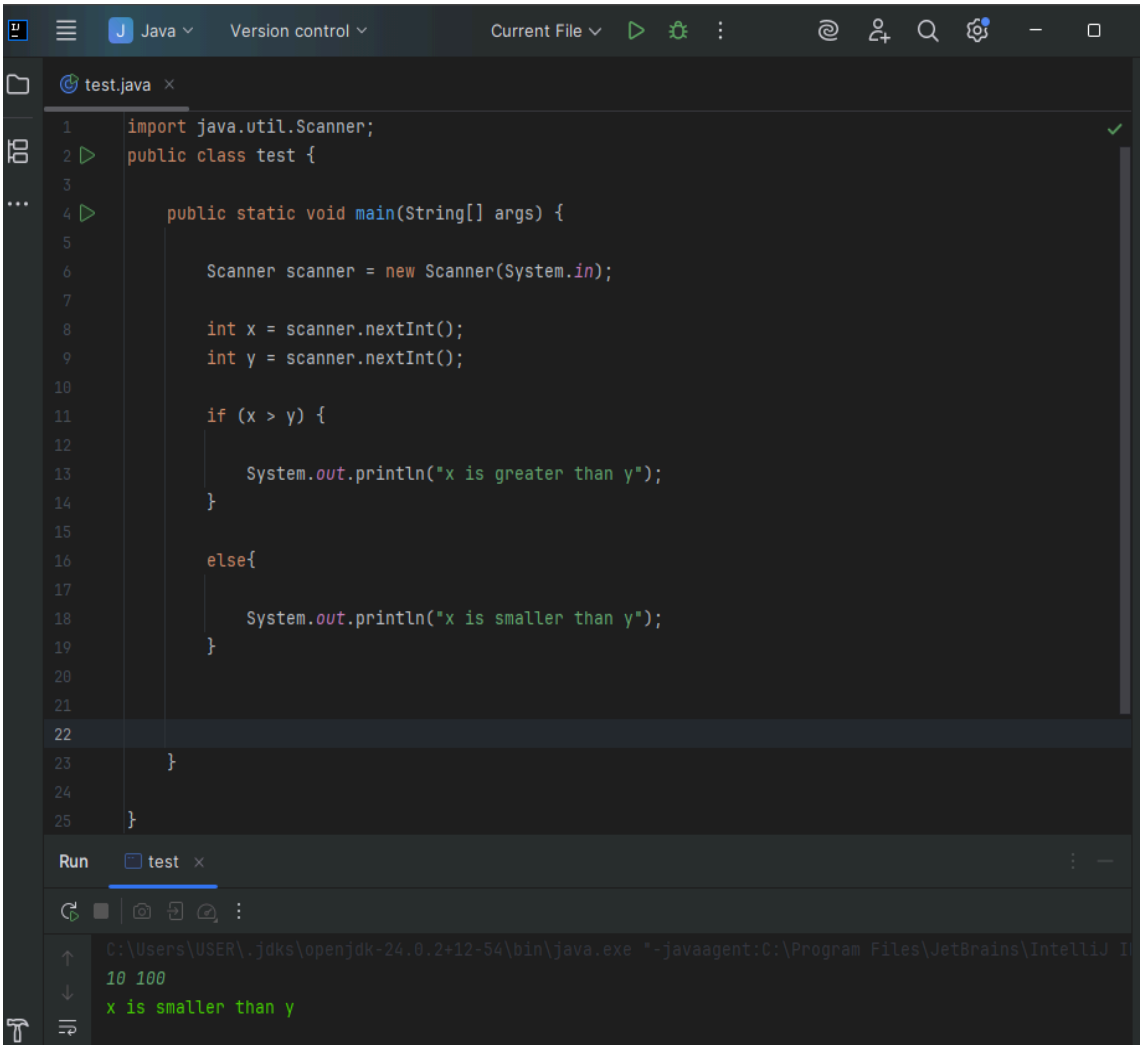
☑ ***This code gives String output.***

7. Java Math:



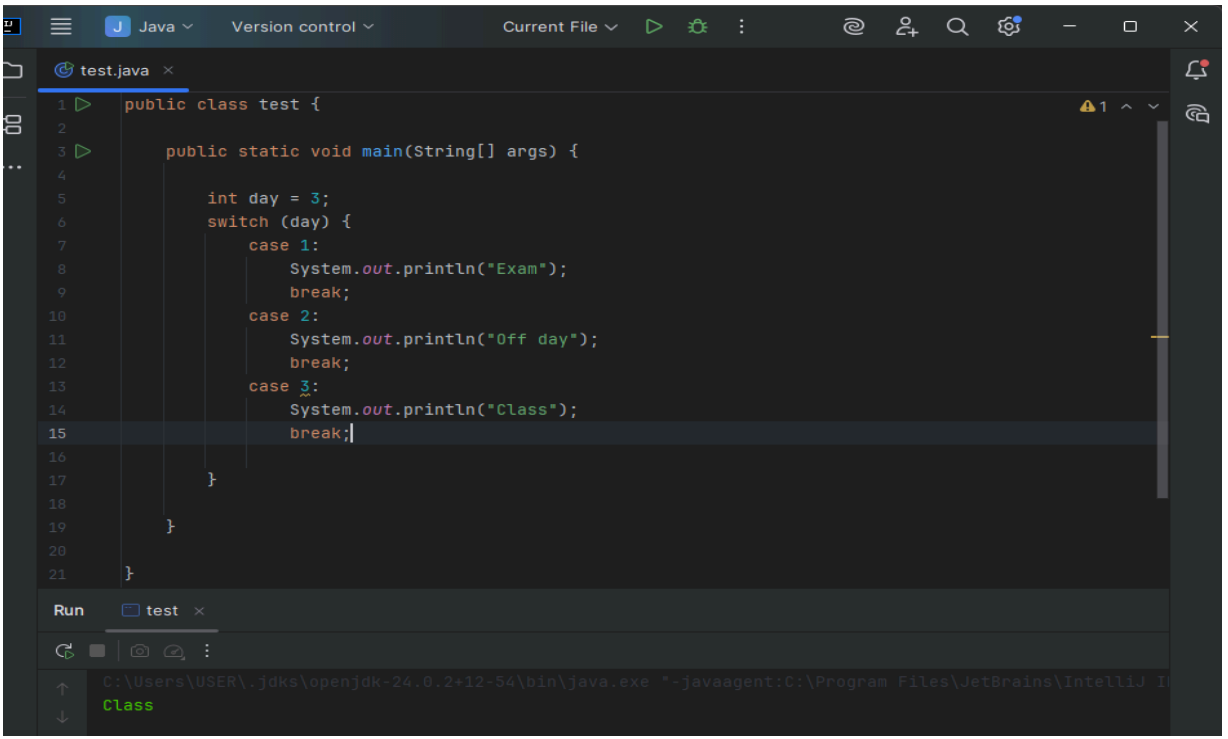
☑ ***This code shows all the math functions and their use in java.***

8. Java If…Else:



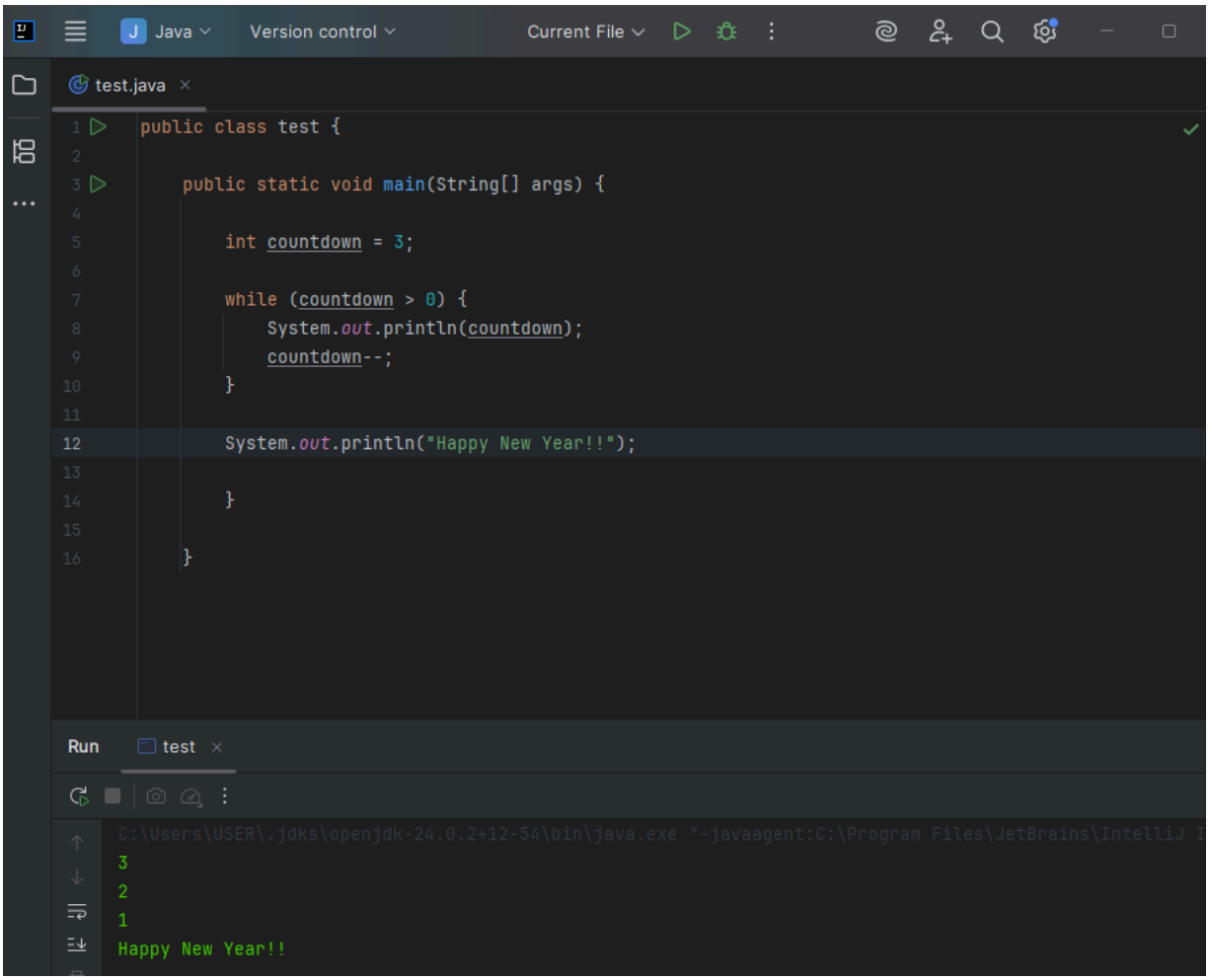
☑ ***This Java code compares two integers using if…else.***

9. Java Switch:



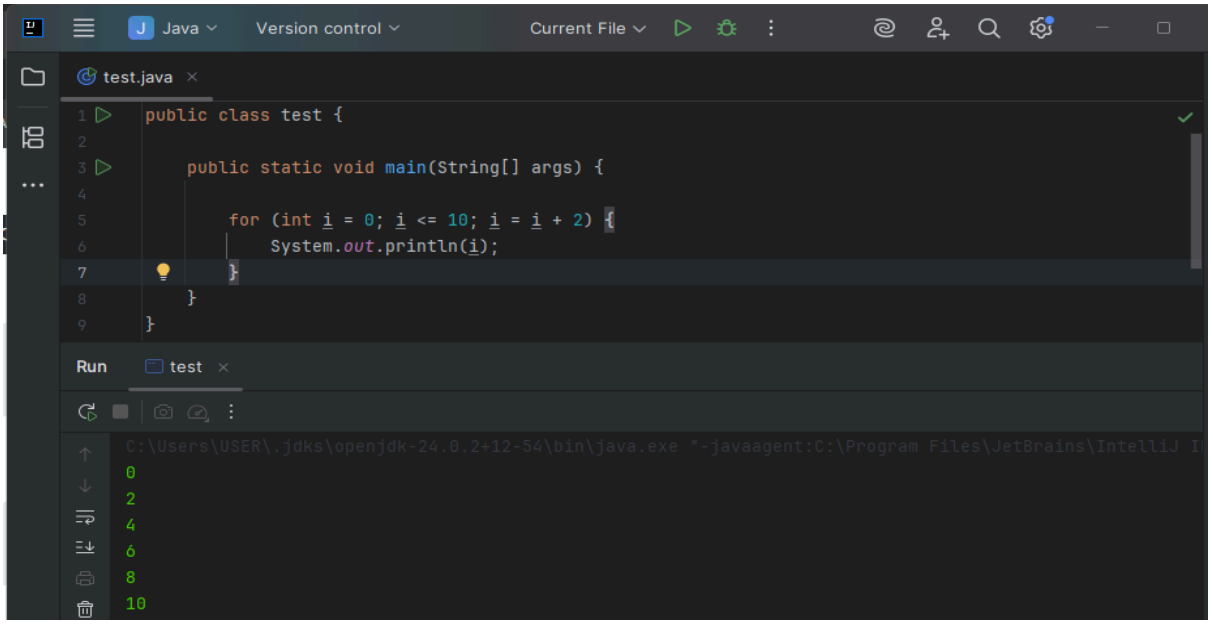
☑ ***This code shows the basic use of Switch functions in Java***

10. Java While Loop.

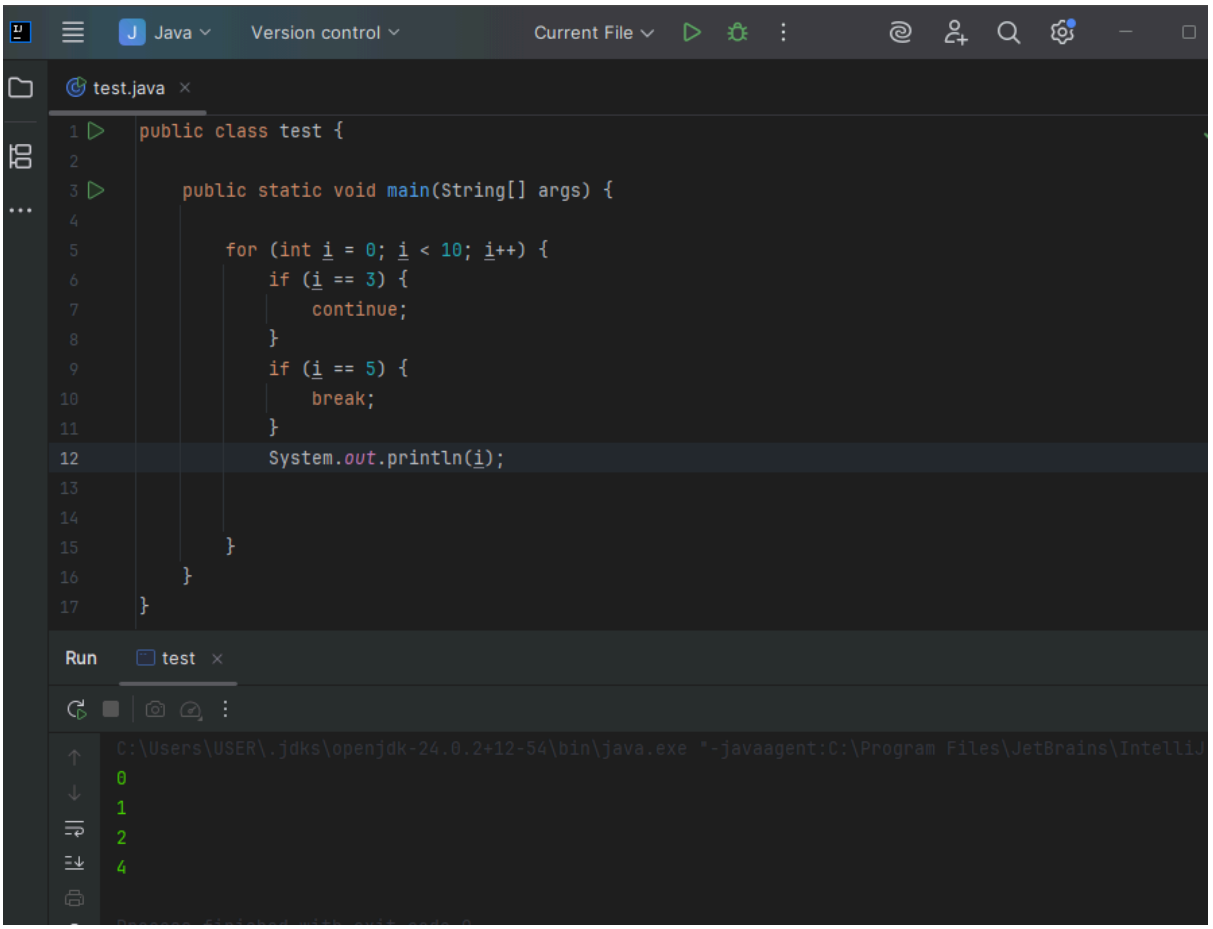


☑ ***This code shows simple while loop use in Java.***

11. Java For Loop:



12. Java Break and Continue:

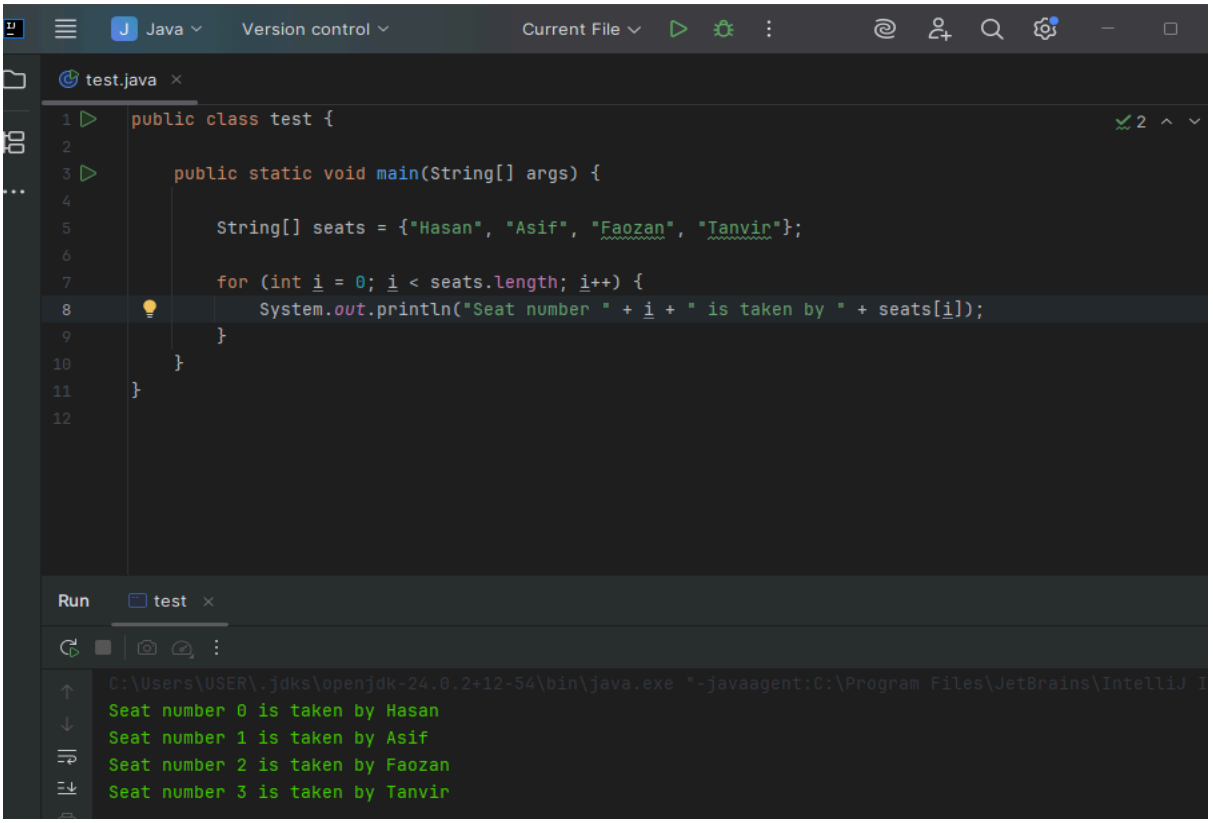


```java
public class test {

    public static void main(String[] args) {

        for (int i = 0; i < 10; i++) {
            if (i == 3) {
                continue;
            }
            if (i == 5) {
                break;
            }
            System.out.println(i);


        }
    }
}
```

```
C:\Users\USER\.jdks\openjdk-24.0.2+12-54\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ
0
1
2
4
```

☑ ***This code shows Break and Continue statements used in Java.***

13. Java Arrays.



```java
public class test {

    public static void main(String[] args) {

        String[] seats = {"Hasan", "Asif", "Faozan", "Tanvir"};

        for (int i = 0; i < seats.length; i++) {
            System.out.println("Seat number " + i + " is taken by " + seats[i]);
        }
    }
}
```

```
C:\Users\USER\.jdks\openjdk-24.0.2+12-54\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ I
Seat number 0 is taken by Hasan
Seat number 1 is taken by Asif
Seat number 2 is taken by Faozan
Seat number 3 is taken by Tanvir
```

☑ ***This code shows simple use of Array in Java.***