

University of Science and Technology Chittagong



Department of Computer Science and Engineering

Lab Task 4

Object Oriented Programming (Java)

Programming Basics

Course Instructor: Debabrata Mallick

Submitted By: Reya Moni

Student ID: 0022520005101026

Roll No: 25070126

Semester: 2nd Semester 45th Batch

Submission Date: 30/01/2026

Java If ... Else

```
J AllIfElse.java ×
J AllIfElse.java > ⚙ AllIfElse
1  public class AllIfElse {
2      Run | Debug
3      |  public static void main(String[] args) {
4          |  boolean isRaining = true;
5
6          if (isRaining) {
7              |  System.out.println(x: "Bring an umbrella!");
8
9      }
10 }
```

Code & Output

```
Bring an umbrella!
Run | Debug
```

Conditions and if statements let you control the flow of your program - deciding which code runs, and which code is skipped.

Think of it like real life: *If it rains, take an umbrella. Otherwise, do nothing.*

Every **if** statement needs a condition that results in true or false.

This means **if** statements work hand-in-hand with boolean values.

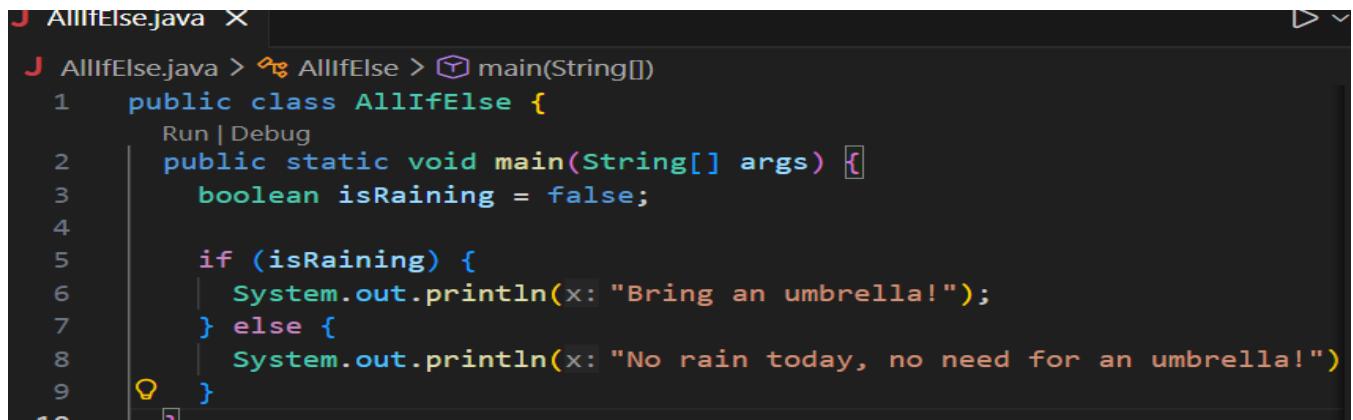
```
J AllIfElse.java ×
J AllIfElse.java > ⚙ AllIfElse
1  public class AllIfElse {
2      Run | Debug
3      |  public static void main(String[] args) {
4          |  int x = 20;
5          |  int y = 18;
6          if (x > y) {
7              |  System.out.println(x: "x is greater than y");
8
9      }
10 }
```

Code & Output

```
x is greater than y
Run | Debug
```

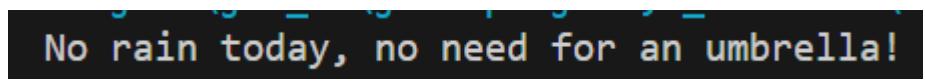
In the example above we use two variables, **x** and **y**, to test whether **x** is greater than **y** (using the **>** operator). As **x** is 20, and **y** is 18, and we know that 20 is greater than 18, we print to the screen that "x is greater than y".

Comparison is also often used to check if two values are *equal*, using the **==** operator.

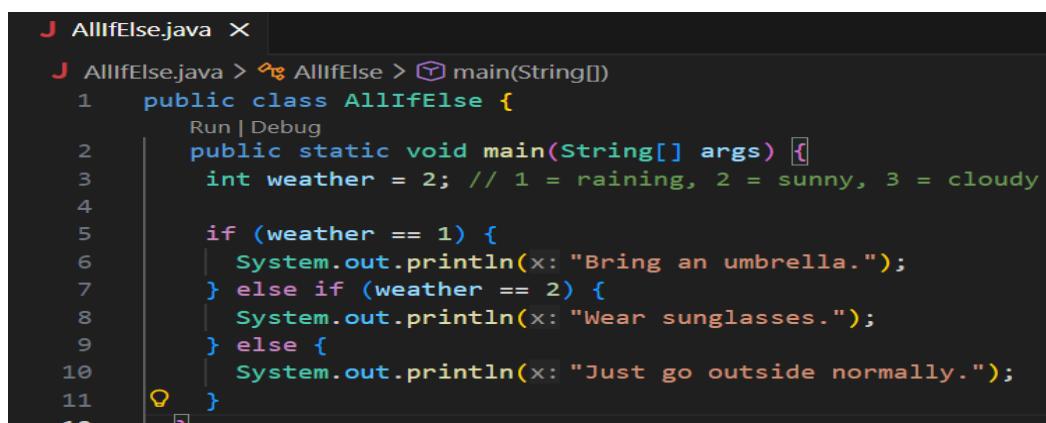


```
J AllIfElse.java X
J AllIfElse.java > A AllIfElse > main(String[])
1  public class AllIfElse {
2      Run | Debug
3      public static void main(String[] args) {
4          boolean isRaining = false;
5
6          if (isRaining) {
7              System.out.println(x: "Bring an umbrella!");
8          } else {
9              System.out.println(x: "No rain today, no need for an umbrella!")
10         }
11     }
12 }
```

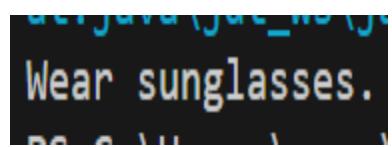
Code & Output



```
No rain today, no need for an umbrella!
```



```
J AllIfElse.java X
J AllIfElse.java > A AllIfElse > main(String[])
1  public class AllIfElse {
2      Run | Debug
3      public static void main(String[] args) {
4          int weather = 2; // 1 = raining, 2 = sunny, 3 = cloudy
5
6          if (weather == 1) {
7              System.out.println(x: "Bring an umbrella.");
8          } else if (weather == 2) {
9              System.out.println(x: "Wear sunglasses.");
10         } else {
11             System.out.println(x: "Just go outside normally.");
12         }
13     }
14 }
```



```
java AllIfElse
Wear sunglasses.
```

Since **weather** is 2, the first condition (**weather == 1**) is not met, so the **if** block is skipped. The program then checks the **else if** condition (**weather == 2**), which is true. That means the **else if** block runs and prints "Wear sunglasses."

END