Al-Mustaqbal University
College of Sciences
Intelligent Medical System Department

جامـــــــعة المـــــستـقبـل
AL MUSTAQBAL UNIVERSITY

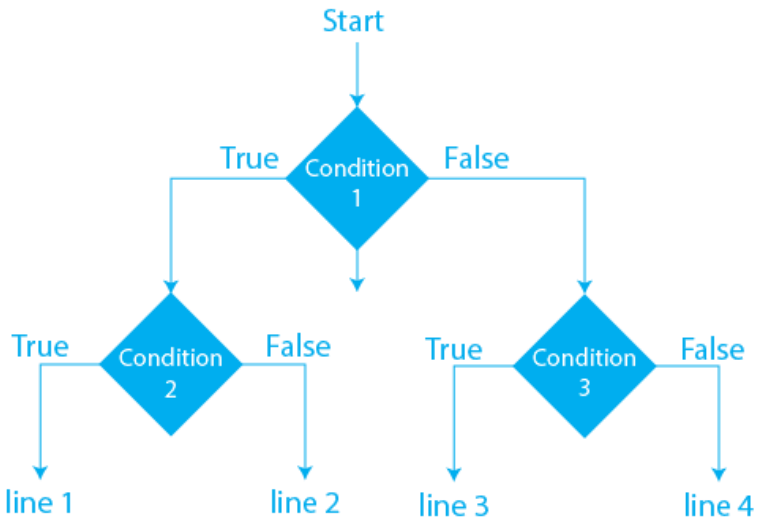
كلية العلوم
قـســـــــــم الانظمة الطبية الذكية

Lecture: (10)

•Nest if-else statements

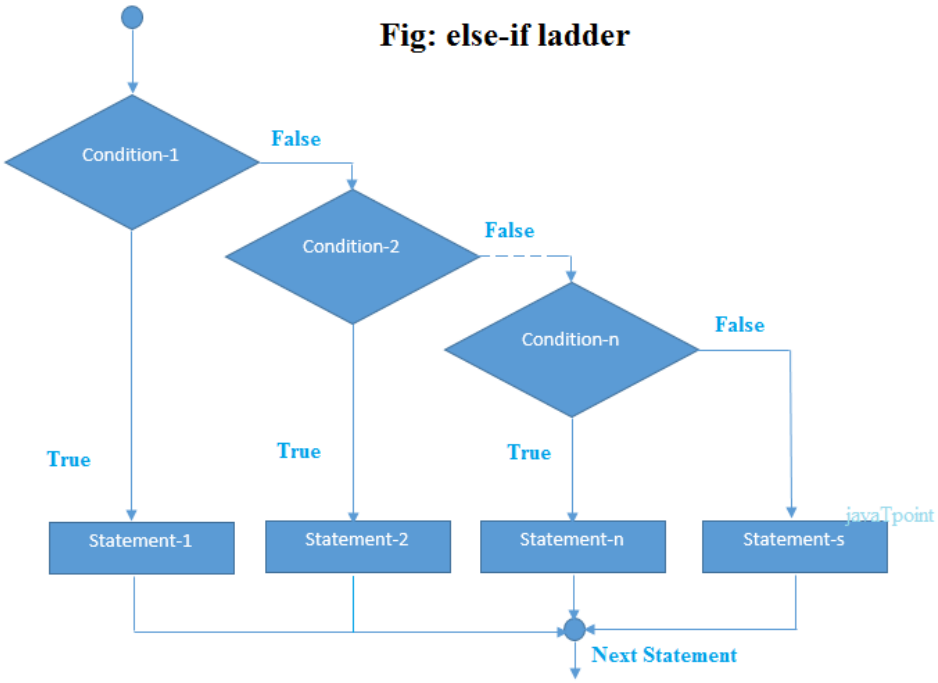
Subject: Computer Programming (I)
Level: First
Lecturer: Dr. Maytham N. Meqdad

- Flow Chart of Nested If-Else



Flow Chart

Fig: else-if ladder



```
public class NestedIfElseExample {
    public static void main(String[] args) {
        int age = 18;
        String nationality = "Iraqi";

        // Checking age eligibility
        if (age >= 18) {
            // If age is 18 or above, check nationality
            if (nationality.equals("US")) {
                System.out.println("You are eligible to vote in the US
elections.");
            } else if (nationality.equals("Iraqi")) {
                System.out.println("You are eligible to vote in Iraqi
elections.");
            } else {
                System.out.println("You are eligible to vote in your
respective country elections.");
            }
        } else {
            // If age is below 18, not eligible to vote
            System.out.println("You are not eligible to vote yet.");
        }
    }
}
```

- **This program checks the eligibility of a specific person to vote based on their age and nationality. If the person is 18 years old or older, their nationality is checked. If the nationality is "US", a message indicating eligibility to vote in the US elections is printed. If the nationality is "Iraqi", a message indicating eligibility to vote in the Iraqi elections is printed. If the nationality is anything else, a message indicating eligibility to vote in their respective country's elections is printed. If the person is younger than 18 years old, a message indicating that the person is not eligible to vote yet is printed.**

- Ask the user to input a month number (1-12). check if the entered month is valid (between 1 and 12, inclusive).

- March, April, and May are considered spring.
- June, July, and August are considered summer.
- September, October, and November are considered autumn.
- December, January, and February are considered winter.

```
import java.util.Scanner;

public class SeasonDetector {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the month (1-12): ");
        int month = scanner.nextInt();

        // Checking the validity of the month entered
        if (month >= 1 && month <= 12) {
            // Determining the season based on the month
            if (month >= 3 && month <= 5) {
                System.out.println("It's spring.");
            } else if (month >= 6 && month <= 8) {
                System.out.println("It's summer.");
            } else if (month >= 9 && month <= 11) {
                System.out.println("It's autumn.");
            } else {
                System.out.println("It's winter.");
            }
        } else {
            System.out.println("Invalid month entered. Month
must be between 1 and 12.");
        }

        scanner.close();
    }
}
```