

If else Nested or ladder Statements

by Kunal Sir

Examples:

```
import java.util.Scanner;
public class CalculatorApp {
 public int calculate(int a, int a, int input) {
    if (input == 1) {
      return a + a;
    } else if (input == 2) {
      return a - b;
    } else if (input == 3) {
      return a * b;
    } else if (input == 4) {
           return a/b;
          } else {
      return -1; // Invalid operation
```



If else Nested or ladder Statements by Kunal Sir public static void main(String[] args) { Scanner sc = new Scanner(System.in); CalculatorApp c = new CalculatorApp(); System.out.print("Enter first number: "); int num1 = sc.nextInt(); System.out.print("Enter second number: "); int num2 = sc.nextInt(); System.out.println("Choose operation: 1 = Add, 2 = Subtract, 3 = Multiply, 4 = Divide"); int operation = sc.nextInt(); int result = c.calculate(num1, num2, operation); if (result == -1) { System.out.println("Invalid operation.");

} else {



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System.out.println("Result: " + result);
}

Assigment 1

I created a class called GradeEvaluator. It has a method named evaluateGrade() that takes the student's marks as input. I used the Scanner class to get the marks from the user. Then I used ifelse statements to check the range and print the grade: A, B, C, or Fail. If the marks are outside 0 to 100, it shows an error message. I called the evaluateGrade() method to display the result.

Assigment 2

I made a class called ChannelPicker. It has a method called selectChannel() that asks the user to enter a number. I used the Scanner class to take input. Then I used if-else conditions to check which channel was selected. If the user enters 1, it prints "You selected TV9 Marathi News". If they enter 2, it prints "You selected ABP News". If they enter 3, it prints "You selected Aaj Tak". If the number is invalid, it shows an error message. I called the selectChannel() method to display the result.

Assignment 3



I created a class called TicketManager. It has a method named bookTicket() that takes a route number from the user. I used the Scanner class to get the input. Then I used if-else conditions to check which route was selected. If the user enters 1, it prints "Booking confirmed: Pune to Mumbai". If they enter 2, it prints "Booking confirmed: Delhi to Jaipur". If they enter 3, it prints "Booking confirmed: Bangalore to Chennai". If the route number is invalid, it shows an error message. I called the bookTicket() method to display the booking confirmation.

Assigment 4

I made a class called RechargeAssistant. It has a method called showPlanDetails() that asks the user to enter a plan number. I used the Scanner class to take input. Then I used if-else conditions to check which plan was selected. If the user enters 1, it prints "You selected ₹399 plan for 56 days". If they enter 2, it prints "You selected ₹199 plan for 28 days". If they enter 3, it prints "You selected ₹599 plan for 84 days". If the plan number is invalid, it shows an error message. I called the showPlanDetails() method to display the recharge confirmation.

Assignment 5

I created a class called DeliveryStatusChecker. It has a method named trackParcel() that takes a tracking number from the user. I used the Scanner class to get the input. Then I used if-else conditions to check the status of the parcel. If the tracking



number is 101, it prints "Your parcel is in transit". If it's 202, it prints "Your parcel has been delivered". If it's 303, it prints "Your parcel is delayed". If the tracking number is invalid, it shows an error message. I called the trackParcel() method to display the result.

Assignment 6

I created a class called GradeEvaluator. Inside it, I wrote a method named evaluateGrade() that takes the student's marks as input using the Scanner class. Then I used **nested if statements** to check the grade:

- First, I checked if the marks are between 0 and 100.
 - 。 If yes, I added another if inside:
 - If marks are 90 or above → Grade A
 - Else if marks are 75 or above → Grade B
 - Else if marks are 50 or above → Grade C
 - Else \rightarrow Fail
- If the marks are not between 0 and 100, it prints "Invalid marks. Please enter between 0 and 100."

I called the evaluateGrade() method to display the result.



Assignment 7

I created a class called ChannelPicker. It has a method named selectChannel() that takes a number from the user using the Scanner class. I used **nested if statements** to check the selected channel:

- First, I checked if the number is greater than 0 and less than 4.
 - o If yes, I added another if inside:
 - If number is 1 → "You selected TV9 Marathi News"
 - Else if number is 2 → "You selected ABP News"
 - Else → "You selected Aaj Tak"
- If the number is not between 1 and 3, it prints "Invalid selection.
 Please choose 1, 2, or 3."

I called the selectChannel() method to display the result.

Assignment 8

I created a class called TicketManager. It has a method named bookTicket() that takes a route number from the user using the Scanner class. I used **nested if statements** to check the route:

- First, I checked if the route number is 1, 2, or 3.
 - If yes, I added another if inside:
 - If route is 1 → "Booking confirmed: Pune to Mumbai"



- Else if route is 2 → "Booking confirmed: Delhi to Jaipur"
- Else → "Booking confirmed: Bangalore to Chennai"
- If the route number is not valid, it prints "Invalid route number. Please enter 1, 2, or 3."

I called the bookTicket() method to display the booking confirmation.

Developed Bank application

import java.util.Scanner;

```
public class NkBank {
  double balance = 20000;

public void menu() {
    Scanner sc = new Scanner(System.in);
    System.out.println("Welcome to NK Bank");
```



```
System.out.println("1. Deposit");
  System.out.println("2. Withdraw");
  System.out.println("3. Transfer");
  System.out.println("4. View Balance");
  System.out.print("Choose option (1–4): ");
  int choice = sc.nextInt();
  if (choice == 1) deposit();
  else if (choice == 2) withdraw();
  else if (choice == 3) transfer();
  else if (choice == 4) viewBalance();
  else System.out.println("Invalid choice.");
public void deposit() {
  Scanner sc = new Scanner(System.in);
  System.out.print("Enter amount to deposit: ");
```



```
double amt = sc.nextDouble();
  if (amt > 0) {
    balance += amt;
    System.out.println("Deposited ₹" + amt);
  } else {
    System.out.println("Amount must be greater than 0.");
public void withdraw() {
  Scanner sc = new Scanner(System.in);
  System.out.print("Enter amount to withdraw: ");
  double amt = sc.nextDouble();
  if (amt <= 0) {
    System.out.println("Amount must be greater than 0.");
  } else if (amt > balance) {
```



```
System.out.println("Insufficient balance.");
} else {
  balance -= amt;
  System.out.println("Withdrawn ₹" + amt);
}
```

```
public void transfer() {
    Scanner sc = new Scanner(System.in);
    System.out.print("Enter account number: ");
    String acc = sc.next();
    System.out.print("Enter amount to transfer: ");
    double amt = sc.nextDouble();

if (amt <= 0) {
        System.out.println("Amount must be greater than 0.");
    } else if (amt > balance) {
        System.out.println("Insufficient balance.");
}
```



```
} else {
      balance -= amt;
      System.out.println("Transferred ₹" + amt + " to account " +
acc);
  }
  public void viewBalance() {
    System.out.println("Your balance: ₹" + balance);
  public static void main(String[] args) {
    NkBank app = new NkBank();
    app.menu();
```