Switch

1. Create a calculator using switch

import java.util.Scanner;

public class SwitchCalculator {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter two numbers: ");

double a = sc.nextDouble();

double b = sc.nextDouble();

System.out.print("Enter operator (+, -, \*, /): ");

char op = sc.next().charAt(0);

switch (op) {

case '+':

System.out.println("Result: " + (a + b));

break;

case '-':

System.out.println("Result: " + (a - b));

break;

case '\*':

System.out.println("Result: " + (a \* b));

break;

case '/':

if (b != 0)

System.out.println("Result: " + (a / b));

else

System.out.println("Cannot divide by zero");

break;

default:

System.out.println("Invalid operator");

}

}

}

2. Map number to month name using switch

import java.util.Scanner;

public class MonthMapper {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter month number (1-12): ");

int month = sc.nextInt();

switch (month) {

case 1: System.out.println("January"); break;

case 2: System.out.println("February"); break;

case 3: System.out.println("March"); break;

case 4: System.out.println("April"); break;

case 5: System.out.println("May"); break;

case 6: System.out.println("June"); break;

case 7: System.out.println("July"); break;

case 8: System.out.println("August"); break;

case 9: System.out.println("September"); break;

case 10: System.out.println("October"); break;

case 11: System.out.println("November"); break;

case 12: System.out.println("December"); break;

default: System.out.println("Invalid month number");

}

}

}

3. Implement a simple menu using switch

import java.util.Scanner;

public class MenuExample {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Menu:");

System.out.println("1. Say Hello");

System.out.println("2. Say Goodbye");

System.out.println("3. Exit");

System.out.print("Enter choice: ");

int choice = sc.nextInt();

switch (choice) {

case 1:

System.out.println("Hello!");

break;

case 2:

System.out.println("Goodbye!");

break;

case 3:

System.out.println("Exiting...");

break;

default:

System.out.println("Invalid choice");

}

}

}

4. Use enhanced switch (Java 14+) for better syntax

import java.util.Scanner;

public class EnhancedSwitch {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter a day number (1-7): ");

int day = sc.nextInt();

String dayName = switch (day) {

case 1 -> "Monday";

case 2 -> "Tuesday";

case 3 -> "Wednesday";

case 4 -> "Thursday";

case 5 -> "Friday";

case 6 -> "Saturday";

case 7 -> "Sunday";

default -> "Invalid day";

};

System.out.println("Day: " + dayName);

}

}

5. Implement day of the week based on integer input

import java.util.Scanner;

public class DayOfWeek {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter day number (1-7): ");

int day = sc.nextInt();

switch (day) {

case 1: System.out.println("Sunday"); break;

case 2: System.out.println("Monday"); break;

case 3: System.out.println("Tuesday"); break;

case 4: System.out.println("Wednesday"); break;

case 5: System.out.println("Thursday"); break;

case 6: System.out.println("Friday"); break;

case 7: System.out.println("Saturday"); break;

default: System.out.println("Invalid input");

}

}

}