

```
import java.util.Scanner;

public class Assignment {

    public static void main(String[] args) {
```

// 1. Write the java statement that assigns 1 to x if y is greater than 0.

```
        int x, y;

        Scanner scan = new Scanner(System.in);

        System.out.println("Enter y");

        y = scan.nextInt();

        if (y > 0) {

            x = 1;

            System.out.printf("x = %d", x);

        } else {

            System.out.println("Invalid");

        }

    }
```

// 2. Suppose that score is a variable of type double. Write the java statement that increases the score by 5 marks if score is between 80 and 90.

```
        double score;

        Scanner scan = new Scanner(System.in);

        System.out.println("Enter score : ");

        score = scan.nextDouble();

        if (score > 80 && score < 90) {

            score = score + (float) 5;

            System.out.printf("your new score is %f", score);

        } else {

            System.out.println("Invalid");

        }

    }
```

// 3. Rewrite in java the following statement without using Not(!) operator: item = !((i<10) || (v>=50))

==> The statement that has no ! operator is item = ((i<10)&&(v>=50))

// 4. Write a java statement that print true if x is an odd number and positive.

```
Scanner scan = new Scanner(System.in);  
System.out.printf("Enter x : ");  
int x = scan.nextInt();  
if (x % 2 != 0 && x > 0) {  
    System.out.println("true");  
} else {  
    System.out.println("false");  
}
```

// 5. Write a java statement that prints true if both x and y are positive numbers.

```
Scanner input = new Scanner(System.in);  
System.out.println("Enter x : ");  
float x = input.nextFloat();  
System.out.println("Enter y : ");  
float y = input.nextFloat();  
boolean choice1 = true;  
boolean choice2 = false;  
if (x > 0 && y > 0) {  
    System.out.println(choice1);  
} else {  
    System.out.println(choice2);  
}
```

// 6. Write a java statement that prints true if x and y has the same sign(+/-).

```
long x;  
long y;  
Scanner Input = new Scanner(System.in);  
System.out.println("Enter x :");  
x = Input.nextInt();  
System.out.println("Enter y :");  
y = Input.nextInt();  
if (x > 0 && y > 0) {
```

```
System.out.println("true");  
} else {  
System.out.println("false");  
}
```

// 7. Convert the following statement to if-else and if-then statement

```
String dayString1, dayString2, dayString3;
```

```
int day = KB.nextInt();
```

```
switch (day) {
```

```
    case 1: dayString1 = "Saturday";
```

```
    case 2: dayString2 = "Sunday";
```

```
    break;
```

```
    case 3: dayString3 = "Monday";
```

```
    break;
```

```
    case 4: dayString1 = "Tuesday";
```

```
    case 5: dayString2 = "Wednesday";
```

```
    break;
```

```
    default: dayString3 = "Invalid day";
```

```
    break;
```

```
}
```

// Method 1 : if-else statement

```
String dayString1, dayString2, dayString3;
```

```
int day = KB.nextInt();
```

```
if (day == 1) {
```

```
    dayString1 = "Saturday";
```

```
}
```

```
if (day == 2) {
```

```
    dayString2 = "Sunday";
```

```
}
```

```
if (day == 3) {
```

```
    dayString3 = "Monday";
```

```
}
```

```
if (day == 4) {  
    dayString1 = "Tuesday";  
}  
if (day == 5) {  
    dayString2 = "Wednesday";  
}  
if (day != 1 && day != 2 && day != 3 && day != 4 && day != 5) {  
    dayString3 = "Invalid day";  
}
```

// Method 2 : if-then statement

```
String dayString1, dayString2, dayString3;  
int day = KB.nextInt();  
if (day == 1) {  
    dayString1 = "Saturday";  
} else if (day == 2) {  
    dayString2 = "Sunday";  
} else if (day == 3) {  
    dayString3 = "Monday";  
} else if (day == 4) {  
    dayString1 = "Tuesday";  
} else if (day == 5) {  
    dayString2 = "Wednesday";  
} else {  
    dayString3 = "Invalid day";  
}
```

// 8. Body Mass Index (BMI) is a measure of health on weight. It can be calculated by taking your weight in kilograms and dividing by the square of your height in meters. Write a program that prompts the user to enter a weight in kilograms and height in meters and displays the BMI.

```
float weight, height, BMI;

Scanner scan = new Scanner(System.in);

System.out.println("Enter weight in kilogram : ");

weight = scan.nextFloat();

System.out.println("Enter height in meter : ");

height = scan.nextFloat();

BMI = weight / (height * height);

System.out.printf("BMI = %f", BMI);
```

// 9. . Write a program that reads the performance level of an employee (between 0 and 100) and his salary. Then it increases the salary by 3% if performance level is grater than or equal to 90.

```
Scanner scan = new Scanner(System.in);

System.out.println("Enter performance level :");

int Perforlevel = scan.nextInt();

System.out.println("Enter your base salary :");

float salary = scan.nextFloat();

if (Perforlevel >= 90) {

    salary = salary * (float) 1.03;

    System.out.printf("Salary is %f", salary);

} else {

    System.out.printf("Salary is %f", salary);

}

}
```