

# if-else Questions

**1. Take values of length and Breadth of a rectangle from user and check if it is square or not.**

```
class Rectangle
{
    public static void main(String... s)
    {
        System.out.println("Enter the Length of a Rectangle");
        int length=new java.util.Scanner(System.in).nextInt();

        System.out.println("Enter the Breadth of a Rectangle");
        int breadth=new java.util.Scanner(System.in).nextInt();

        if(length==breadth)
            System.out.println("Rectangle is Square");
        else
            System.out.println("Not a Square");

    }
}
```

## 2. Take two int values from user and print greatest among them.

```
class GreatestNo
{
    public static void main(String... s)
    {
        System.out.println("Enter the 1'st Number");
        int first=new java.util.Scanner(System.in).nextInt();

        System.out.println("Enter the 2'nd Number");
        int second=new java.util.Scanner(System.in).nextInt();

        if(first>second)
            System.out.println("first is greatest that is = "+first);
        else
            System.out.println("second is greatest that is = "+second);
    }
}
```

**3. A shop will give discount of 10% if the cost of purchased quantity is more than 1000.**

**Ask user for quantity**

**Suppose, one unit will cost 100.**

**judge and print total cost for user.**

```
class Shop
{
    public static void main(String... s)
    {
        System.out.println("1 unit will cost Rs 100");
        System.out.println("Enter Your Quantity");
        int qty=new java.util.Scanner(System.in).nextInt();
        int price=qty*100;
        float discount=price/10;
        float discountedprice=price-discount;

        if(price>1000){
            System.out.println("Actual Price is = "+price);
            System.out.println("Discounted Price = "+discountedprice);
        }
        else{
            System.out.println("price is = "+price);
        }
    }
}
```

**4. A company decided to give bonus of 5% to employee if his/her year of service is more than 5 years.**

**Ask user for their salary and year of service and print the net bonus amount.**

```
class Company
{
    public static void main(String... s)
    {
        System.out.println("Enter Your Salary");
        int salary=new java.util.Scanner(System.in).nextInt();

        System.out.println("How Many Years you work on our company");
        int year=new java.util.Scanner(System.in).nextInt();

        float bonus=salary/5;

        if(year>=5){
            System.out.println("Your Bonus is = "+bonus);
        }
        else{
            System.out.println("No Bonus");
        }
    }
}
```

**5. A school has following rules for grading system:**

- |                        |                        |
|------------------------|------------------------|
| <b>a. Below 25 – F</b> | <b>b. 25 to 45 - E</b> |
| <b>c. 45 to 50 - D</b> | <b>d. 50 to 60 - C</b> |
| <b>e. 60 to 80 - B</b> | <b>f. Above 80 - A</b> |

**Ask user to enter marks and print the corresponding grade.**

```
class School
{
    public static void main(String... s)
    {
        System.out.println("Enter your marks");
        int marks=new java.util.Scanner(System.in).nextInt();
        if(marks>=80)
            System.out.println("Grade A");
        else if(marks>=60 && marks<80)
            System.out.println("Grade B");
        else if(marks>50 && marks<60)
            System.out.println("Grade C");
        else if(marks>45 && marks<50)
            System.out.println("Grade D");
        else if(marks>25 && marks<45)
            System.out.println("Grade E");
        else if(marks<=25)
            System.out.println("Grade F");
    }
}
```

**6. Take input of age of 3 people by user and determine oldest and youngest among them.**

```
class OldestPeople
{
    public static void main(String... s)
    {
        System.out.println("Enter 1 person age");
        int first=new java.util.Scanner(System.in).nextInt();

        System.out.println("Enter 2 person age");
        int second=new java.util.Scanner(System.in).nextInt();

        System.out.println("Enter 3 person age");
        int third=new java.util.Scanner(System.in).nextInt();

        if(first>second && first>third)
            System.out.println("First person is older");
        else if(second>first && second>third)
            System.out.println("Second person is older");
        else
            System.out.println("Third person is older");
    }
}
```

**7. Write a program to print absolute value of a number entered by user.**

**Example**

**INPUT : 1   OUTPUT : 1**

**INPUT : - 1   OUTPUT : 1**

```
import java.util.Scanner;

public class AbsoluteValue {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in); // Scanner to take input from user

        System.out.print("Enter a number: ");
        int num = sc.nextInt(); // Read the number

        int absValue;

        if (num < 0) {
            absValue = -num; // Make it positive if it's negative
        } else {
            absValue = num; // If already positive, keep it as is
        }

        System.out.println("Absolute value: " + absValue);
    }
}
```

**8. A student will not be allowed to sit in exam if his/her attendance is less than 75%.**

**take following input from user**

**Number of classes held**

**Number of classes attended.**

**And print percentange of class attended.**

**is student is allowed to sit in exam or not.**

```
class Exam
{
    public static void main(String... s)
    {
        System.out.println("Enter the number of classes Held");
        int ClassHeld=new java.util.Scanner(System.in).nextInt();

        System.out.println("Enter the number of classes attended");
        int Attend=new java.util.Scanner(System.in).nextInt();

        float per=((float)Attend/ClassHeld)*100;
        //int per=(int)((((double)Attend/ClassHeld)*100));
        System.out.println("Percentage is = "+per+"%");
    }
}
```



**9. Modify the above question to allow student to sit if he/she has medical cause. Ask user if he/she has medical cause or not ("Y" or "N") and print accordingly.**

```
class MedicalCause
{
    public static void main(String... s)throws java.io.IOException
    {
        System.out.println("You have medical cause or not");
        int x=System.in.read();
        char medicalcause=(char)x;

        if(medicalcause=='Y' || medicalcause=='y')
            System.out.println("Allow student to sit in class");
        else if(medicalcause=='N' || medicalcause=='n')
            System.out.println("student not allowed to sit in class");
    }
}
```

**10. if x = 2 y = 5 z = 0**

**then find values of the following expressions:**

**a. x == 2**

**b. x != 5**

**c. x !=5 && y >= 5**

**d. z !=0 || x == 2**

**e. !(y < 10)**

class Expression

```
{  
    public static void main(String... s)  
    {  
        int x=2;  
        int y=5;  
        int z=0;  
  
        System.out.println(x==2);  
        System.out.println(x!=5);  
        System.out.println(x!=5 && y>=5);  
        System.out.println(z!=0 || x==2);  
        System.out.println(!(y<10));  
    }  
}
```

**11. Write a program to check whether a entered character is lowercase (a to z) or uppercase (A to Z).**

```
import java.util.Scanner;

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

        System.out.print("Enter a character: ");
        char ch = sc.next().charAt(0); // Read a single character

        if (ch >= 'A' && ch <= 'Z') {
            System.out.println("The character is UPPERCASE.");
        } else if (ch >= 'a' && ch <= 'z') {
            System.out.println("The character is LOWERCASE.");
        } else {
            System.out.println("The character is not an alphabet.");
        }
    }
}
```

**12. Write a program to check if a year is leap year or not. if a year is divisible by 4 then it is a leap year but if the year is century year like 2000, 1900, 2100 then it must be divisible by 400.**

```
class LeapYear
{
    public static void main(String... s)
    {
        System.out.println("Enter year");
        int year=new java.util.Scanner(System.in).nextInt();

        if(year%4==0 && year%400==0)
            System.out.println(year+" is a leap year");
        else
            System.out.println(year+" is not a leap year");
    }
}
```

**13. Ask user to enter age, sex (M or F), marital status (Y or N) and then using following rules print their place of service.**

**if employee is female, then she will work only in urban areas.**

**if employee is a male and age is in between 20 to 40 then he may work in anywhere**

**if employee is male and age is in between 40 to 60 then he will work in urban areas only.**

**And any other input of age should print "ERROR".**

```
class PlaceOfService
{
    public static void main(String s[])throws java.io.IOException
    {
        System.out.println("Enter Your Age");
        int age=new java.util.Scanner(System.in).nextInt();

        System.out.println("Enter Your Gender in M or F");
        int x=System.in.read();
        char gender=(char)x;

        System.out.println("Enter Your Marital Status in Y or N");
        int y=System.in.read();
        char marital=(char)y;

        if(gender=='F' || gender=='f')
            System.out.println("Work only in urban areas");
        else
            System.out.println("Work only in cities areas");
    }
}
```

## 14. Take three values from the user and print them in ascending order

```
class Ascending
{
    public static void main(String... s)
    {
        System.out.println("Enter 3 values");
        int x=new java.util.Scanner(System.in).nextInt();

        int y=new java.util.Scanner(System.in).nextInt();

        int z=new java.util.Scanner(System.in).nextInt();

        int temp=0;
        if(x>y)
        {
            temp=x;
            x=y;
            y=temp; //swap x and y if(x>y)
        }
        if(x>z)
        {
            temp=x;
            x=z;
            z=temp; //swap x and z if (x>z)
        }
        if(y>z)
        {
```

```
        temp=y;  
        y=z;  
        z=temp; //swap y and z if (y>z)  
    }
```

```
    System.out.println("Number in Ascending order : \n" +x+"\n"+y+"\n"+z);
```

```
}
```

```
}
```