**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:**

**a. Below 25 – F b. 25 to 45 - E**

**c. 45 to 50 - D d. 50 to 60 - C**

**e. 60 to 80 - B f. Above 80 - A**

**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 divible 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 Maritial 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 amd 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);

}

}