Todays Topic

- Nested if statement

Nested if

If a if statement is used within if statement then such a control structure is called as nested if.

```
if(condition)
{
        if(condition)
        {
        Statements…
        ……..
        }
}
```

Nested If statement is used to check a condition only if another condition is true

```
import java.util.Scanner;
class demo
{
public static void main(String args[])
        {
        Scanner stdin=new Scanner(System.in);

        System.out.print("Enter a Number:");
        int a=stdin.nextInt();
        if(a>=10 && a<=99)
                {
                System.out.println("It is a 2 digit Number");
                int x=a%10;
                int y=a/10;
                if(x==y)
                        System.out.println("Both digits are same");
                else
                        System.out.println("Both digits are Not same");
                }
        else
                System.out.println("It is not a 2 digit Number");
        }
}
```

WAP to read a number and check if it is a 2 digit no. or not. If it is a 2 digit no. then check if both digits are same or not.

```
import java.util.Scanner;
class demo
{
public static void main(String args[])
        {
        Scanner stdin=new Scanner(System.in);
        System.out.print("Enter a Number:");
        int a=stdin.nextInt();
        if(a>0)
                {
                System.out.println("Number is Positive");
                if(a%2==0)
                        System.out.println("Even Number");
                else
                        System.out.println("Odd Number");
                }
        else
                System.out.println("Number is Not Positive");
        }
}
```

WAP to read a number and check if it is a positive number or not.

If it is a positive number then check if it is even or not.

```
import java.util.Scanner;
class demo
{
public static void main(String args[])
        {
        Scanner stdin=new Scanner(System.in);
        System.out.print("Enter 3 Angles:");
        int a=stdin.nextInt();
        int b=stdin.nextInt();
        int c=stdin.nextInt();
        if(a+b+c==180)
                {
                System.out.println("Triangle can be formed");
                if(a==b && b==c)
                        System.out.println("Eq.Triangle");
                if(a==b || b==c || c==a)
                        System.out.println("Iso.Triangle");
                if(a==90 || b==90 || c==90)
                        System.out.println("Rt.Ag.Triangle");
                }
        else
                System.out.println("Triangle cannot be formed");
        }
}
```

- WAP to read 3 angles and check if triangle can be formed or not. If triangle can be formed then check if it is an **isosceles** or **equilateral** or **right angled triangle**.

```
import java.util.Scanner;
class demo
{
public static void main(String args[])
        {
        Scanner stdin=new Scanner(System.in);
        System.out.print("Enter Marks for 5 Subjects:");
        int a=stdin.nextInt();
        int b=stdin.nextInt();
        int c=stdin.nextInt();
        int d=stdin.nextInt();
        int e=stdin.nextInt();
        int t=a+b+c+d+e;
        System.out.println("Total is "+t);
        if(a>=40 && b>=40 && c>=40 && d>=40 && e>=40)
                {
                System.out.println("Student is Passed...");
                float p=t*100/500f;
                System.out.println("Percentage is "+p);
                if(p>=60)
                        System.out.println("Ist class");
                }
        else
                System.out.println("Student has Failed...");
        }
}
```

WAP to read marks for five subject & print total .

Also print percentage if student is passed & also check for Ist class.

WAP to read a number and check if it is a 4 digit no. or not.

If it is a 4 digit no. then check if sum of its first 2 digits is equals to sum of its last 2 digits .