



# Return Type Programming



# Some Programs To Practice

- Write a function **int smallest(int a, int b, int c)** to return the smallest number among a, b and c, and then call it from the main() function by taking the values of a, b and c from the user and it will print the value of smallest number.
- Write a function **int evendigits(int n)** to return the sum of even digits to the main( ) function, and then call it from the main() function by taking the value of n from the user and print sum of even digits.
- Write a function **int lcm(int a, int b)** to return the LCM of two numbers, and then call it from the main() function by taking the value of a and b from the user, and print the value of its LCM.
- Write a function **double series(int n)** to return the sum of series given below up to n terms, and then call it from the main() function by taking the value of n from the user, and print the sum.

$$S = 1 + (1-2) + (1-2+3) + (1-2+3-4) + \dots n \text{ terms}$$

- Write a function **boolean isPalin(int n)** to check whether the number n is palindrome or not, and then call it from the main() function by taking the value of n from the user and use the Boolean value to print whether the number is palindrome or not.

## Program for int smallest( )

```
import java.util.*;
class program1 {
    int smallest (int a, int b, int c) {
        if(a<b&& a<c)
            return a;
        else if(b<a&& b<c)
            return b;
        else
            return c;
    }
    public static void main(String Args[]) {
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter three numbers");
        int x,y,z;
        x= sc.nextInt();
        y= sc.nextInt();
        z= sc.nextInt();
        program1 ob= new program1();
        int sm= ob.smallest(x,y,z);
        System.out.println(sm);
    }
}
```

## Program for int evendigits( )

```
import java.util.*;
class program2 {
    int evendigits (int a){
        int s=0;
        while(a>0){
            int d = a%10;
            if (d%2==0)
                s=s+d;
            a/=10;
        }
        return s;
    }
    public static void main(String Args[]) {
        Scanner sc= new Scanner(System.in);
        int x;
        x= sc.nextInt();
        program2 ob= new program2();
        int sum = ob.evendigits(x);
        System.out.println(sum);
    }
}
```

# Program for int lcm( )

```
import java.util.*;
class program3 {
    int lcm(int a, int b) {
        int t;
        if(a<b){
            t=a;
            a=b;
            b=t;
        }
        int m=a;
        while(m%b!=0)
            m=m+a;
        return m;
    }
    public static void main(String Args[]) {
        Scanner sc= new Scanner(System.in);
        int x;
        x= sc.nextInt( );
        y= sc.nextInt
        program3 ob= new program3();
        int l= ob.lcm(x,y);
        System.out.println(l);
    }
}
```

# Program for double series( )

```
import java.util.*;
class program5 {
    double series(int n) {
        int f=0;
        double s=0.0;
        for(int i=1; i<=n; i++) {
            for(int j=1;j<=i;j++){
                f = f+(j)*sign;
                sign= sign * -1;
            }
            s=s+f;
        }
        return s;
    }
    public static void main(String Args[]) {
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter the number");
        int n;
        n= sc.nextInt();
        program5 ob= new program5();
        double s = ob.series(n);
        System.out.println(s);
    }
}
```

# Program for boolean isPalin( )

```
import java.util.*;
class program4 {
    boolean isPalin(int n) {
        int t , r = 0 , d;
        t=n;
        while(t > 0){
            d =t;
            r=r*10+d;
            t=t/10;
        }
        if (r==n)
            return true;
        else
            return false;
    }
    public static void main(String Args[]) {
        Scanner sc= new Scanner(System.in);
        int n;
        n= sc.nextInt( );
        program4 ob= new program4();
        boolean p = ob.isPalin(n);
```

```
        if (p)
        {
            System.out.println("Palindrome Number");
        }
        else
        {
            System.out.println("Not a Palindrome Number");
        }
    }
}
```