

Sum of Even Numbers Till N

```
import java.util.* ;
import java.io.*;
public class Solution {
    public static long evenSumTillN(int n) {
        // Write your code here.
        long num = 0;
        for(int i=0; i<=n; i=i+2)
        {
            num = num + i;
        }
        return num;
    }
}
```

Fahrenheit to Celsius

```
import java.util.* ;
import java.io.*;
class Solution {

    public static void main(String args[]) {

        // Write code here
        Scanner user_input = new Scanner(System.in);
        int start = user_input.nextInt();
        int end = user_input.nextInt();
        int gap = user_input.nextInt();
        for(int i=start; i<=end; i=i+gap)
        {
            System.out.println(i + " " + ((i-32)*5)/9 + "");
        }
    }
}
```

Sum of even & odd

```
import java.util.*;
class Solution {
```

```

public static void main(String args[]) {

    // Write code here
    Scanner user_input = new Scanner(System.in);
    int N = user_input.nextInt();
    int even = 0;
    int odd = 0;
    int temp = 0;
    while(N>0)
    {
        temp = N%10;
        N =N/10;
        if(temp%2==0)
            even = even + temp;
        else
            odd = odd + temp;
    }
    System.out.println(even + " " + odd + "");
}
}

```

Find power of a number

```

import java.util.* ;
import java.io.*;
class Solution {

    public static void main(String args[]) {

        // Write code here
        Scanner user_input = new Scanner(System.in);
        int num = user_input.nextInt();
        int power = user_input.nextInt();
        int ans = 1;
        if(power==0)
            ans = 1;
        else
            for(int i=1; i<=power; i++)
            {
                ans = ans*num;
            }
        System.out.println((int)ans);
    }
}

```

```
}
```

Factorial of a Number

```
import java.util.*;
class Solution {

    public static void main(String args[]) {

        Scanner user_input = new Scanner(System.in);
        long num = user_input.nextLong();
        if(num==0 || num==1)
            num = 1;
        else
            for(long i=num-1; i>0; i--)
            {
                num = num*i;
            }
        System.out.println(num);
    }
}
```

N-th Fibonacci Number

```
import java.util.*;
import java.io.*;

public class Solution {

    public static long[][] multiply(long[][] a, long[][] b, long mod)

    {

        int n = a.length;

        int m = a[0].length;

        int p = b[0].length;

        long[][] c = new long[n][p];

        for (int i = 0; i < n; i++) {
```

```

        for (int j = 0; j < p; j++) {

            for (int k = 0; k < m; k++) {

                c[i][j] = (c[i][j] + (a[i][k] * b[k][j]) % mod) % mod;

            }

        }

    }

    return c;

}

public static long[][] power(long[][] base, long exp, long mod) {

    if (exp == 0) {

        int n = base.length;

        long[][] ans = new long[n][n];

        for (int i = 0; i < n; i++)

        {

            ans[i][i] = 1;

        }

        return ans;

    }

    long[][] res = power(base, exp / 2, mod);

    res = multiply(res, res, mod);

    if (exp % 2 != 0) {

```

```
        res = multiply(res, base, mod);

    }

    return res;

}

public static int fibonacciNumber(int n)

{

    long mod = (long) 1e9 + 7;

    long[][] dp = {{1, 1}, {1, 0}};

    long[][] ans = power(dp, n - 1, mod);

    return (int) (ans[0][0] % mod);

}

}
```