

# For

## Exercitiul 7

```
a)import java.util.Scanner;
public class Main
{
    public static void main(String[] args) {
        Scanner car=new Scanner(System.in);
        int n=car.nextInt();
        int s=0;
        int p=1;
        int a;
        for (a=1;a<=n;a++){
            s=s+(2*a-1);
            p=p*(2*a-1);
        }
        System.out.println(s);
        System.out.println(p);
        car.close();
    }
}
```

```
b)import java.util.Scanner;
public class Main
{
    public static void main(String[] args) {
        Scanner car=new Scanner(System.in);
        int n=car.nextInt();
        int s=0;
        int p=1;
        int a;
        for (a=1;a<=n;a++){
            s=s+2*a;
            p=p*2*a;
        }
        System.out.println(s);
        System.out.println(p);
        car.close();
    }
}
```

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

```

        int n=car.nextInt();
        int s=0;
        int p=1;
        int a;
        for (a=1;a<=n;a++){
            s=s+3*a;
            p=p*3*a;
        }
        System.out.println(s);
        System.out.println(p);
        car.close();
    }
}

```

```

d)import java.util.Scanner;
public class Main
{
    public static void main(String[] args) {
        Scanner car=new Scanner(System.in);
        int n=car.nextInt();
        int s=0;
        int p=1;
        int a;
        for (a=1;a<=n;a++){
            s=s+4*a;
            p=p*4*a;
        }
        System.out.println(s);
        System.out.println(p);
        car.close();
    }
}

```

### ***Exercitiul 8***

```

import java.util.Scanner;
public class Main
{
    public static void main(String[] args) {
        Scanner car=new Scanner(System.in);
        int n=car.nextInt();
        double s=0;
        int a;
        for (a=1;a<=n;a++){
            if(a%2==0) {
                s=s-1d/a ;
            }
        }
    }
}

```

```

        else {
            s=s+1d/a ;
        }
    }
    System.out.println(s);
    car.close();
}
}

```

## While

### Exercitiul 7

```

a)import java.util.Scanner;
public class Main
{
    public static void main(String[] args) {
        Scanner car=new Scanner(System.in);
        int n=car.nextInt();
        int s=0;
        int p=1;
        int a=1;
        while(a<=n){
            s=s+(2*a-1);
            p=p*(2*a-1);
            a++;
        }
        System.out.println(s);
        System.out.println(p);
        car.close();
    }
}

```

```

b)import java.util.Scanner;
public class Main
{
    public static void main(String[] args) {
        Scanner car=new Scanner(System.in);
        int n=car.nextInt();
        int s=0;
        int p=1;
        int a=1;
        while(a<=n){
            s=s+2*a;
            p=p*2*a;
        }
    }
}

```

```

        a++;
    }
    System.out.println(s);
    System.out.println(p);
    car.close();
}
}

```

```

c)import java.util.Scanner;
public class Main
{
    public static void main(String[] args) {
        Scanner car=new Scanner(System.in);
        int n=car.nextInt();
        int s=0;
        int p=1;
        int a=1;
        while(a<=n){
            s=s+3*a;
            p=p*3*a;
            a++;
        }
        System.out.println(s);
        System.out.println(p);
        car.close();
    }
}

```

```

d)import java.util.Scanner;
public class Main
{
    public static void main(String[] args) {
        Scanner car=new Scanner(System.in);
        int n=car.nextInt();
        int s=0;
        int p=1;
        int a=1;
        while(a<=n){
            s=s+4*a;
            p=p*4*a;
            a++;
        }
        System.out.println(s);
        System.out.println(p);
        car.close();
    }
}

```

## ***Exercitiul 8***

```
import java.util.Scanner;
public class Main
{
    public static void main(String[] args) {
        Scanner car=new Scanner(System.in);
        int n=car.nextInt();
        double s=0;
        int a=1;
        while(a<=n){
            if(a%2==0) {
                s=s-1d/a ;
                a++;
            }
            else {
                s=s+1d/a ;
                a++;
            }
        }
        System.out.println(s);
        car.close();
    }
}
```

## ***Problema spre rezolvare***

```
import java.util.Scanner;
public class Main
{
    public static void main(String[] args) {
        Scanner car=new Scanner(System.in);
        int n=car.nextInt();
        double s=0;
        double p=1;
        int a=1;
        while(a<=n){
            s=s+a/(a+1d);
            p=p*a/(a+1d);
            a++;
        }
        System.out.println(s);
        System.out.println(p);
        car.close();
    }
}
```