

```
public class Armstrong {

    public static void main(String[] args) {

        int number = 371, originalNumber, remainder, result = 0;

        originalNumber = number;

        while (originalNumber != 0)
        {
            remainder = originalNumber % 10;
            result += Math.pow(remainder, 3);
            originalNumber /= 10;
        }

        if(result == number)
            System.out.println(number + " is an Armstrong number.");
        else
            System.out.println(number + " is not an Armstrong number.");
        }
    }
```

```
//program to find armstrong number
```

```
class armstrong
```

```
{
```

```
    public static void main(String[] args)
```

```
    {
```

```
        int a,n,r,n1,ans;
```

```
        system.out.println(" Armstrong numbers between 100 to 999 are as follows :");
```

```
        for(a=100;a<999;a++);
```

```
        {
```

```
            n=a;
```

```
            ans=0;r=0;
```

```
            while(n>0)
```

```
            {
```

```
                r=n%10;
```

```
                ans=ans+(r*r*r);
```

```
                n=n/10;
```

```
            }
```

```
            if(a==ans)
```

```
                system.out.println(a);
```

```
        }
```

```
//income tax
```

```
class Income
```

```
{  
  
    public static void main(String args[])  
    {  
        double t=0;  
        Scanner sc=new Scanner(System.in);  
        System.out.println("Enter income ");  
        double i=sc.nextDouble();  
        t=incomeTax(i);  
        System.out.println("Income tax amount is "+t);  
    }  
}
```

```
static double incomeTax(double i)
```

```
{  
  
    double tax;  
    if(i<=180000)  
        tax=0;  
    else if(i<=300000)  
        tax=0.1*(i-200000);  
    else if(i<=500000)  
        tax=(0.2*(i-300000))+10000;  
    else if(i<=1000000)  
        tax=(0.3*(i-500000))+50000;  
  
    return tax;  
  
}  
}
```

```
//supply marks
```

```
import java.util.Scanner;
```

```
class result
```

```
{
```

```
    public static void main(String[] args)
```

```
    {
```

```
        Scanner sc=new Scanner(System.in);
```

```
        System.out.println("Enter Physics marks:");
```

```
        int s1=sc.nextInt();
```

```
        System.out.println("Enter Chem marks:");
```

```
        int s2=sc.nextInt();
```

```
        System.out.println("Enter Maths marks:");
```

```
        int s3=sc.nextInt();
```

```
        if (s1>60 && s2>60 && s3>60)
```

```
        {
```

```
            System.out.println("pass");
```

```
        }
```

```
        else if ((s1>60 && s2>60) || (s1>60 && s3>60) || (s2>60 && s3>60))
```

```
        {
```

```
            System.out.println("Promoted");
```

```
        }
```

```
    else
```

```
    {
```

```
        System.out.println("Fail");
```

```
    }
```

```
}
```

```
}
```

//simple and compund intrest

```
import java.util.*;

class sici
{
    public static void main (String argu[ ])
    {
        double pr, rate, t, sim,com;
        Scanner sc=new Scanner (System. in);
        System.out.println("Enter the amount:");
        pr=sc.nextDouble();
        System. out. println("Enter the No.of years:");
        t=sc.nextDouble();
        System. out. println("Enter the Rate of interest");
        rate=sc.nextDouble();
        sim=(pr * t * rate)/100;
        com=pr * Math.pow(1.0+rate/100.0,t) - pr;
        System.out.println("Simple Interest="+sim);
        System.out. println("Compound Interest="+com);
    }
}
```

```

package com.cap;

class Sort
{
void bubbleSort(int arr[])
{
int n = arr.length;
for (int i = 0; i < n-1; i++) {
for (int j = 0; j < n-i-1; j++) {
if (arr[j] > arr[j+1]){
int temp = arr[j];
arr[j] = arr[j+1];
arr[j+1] = temp;
}
}
}
}

void printArr(int arr[])
{
int n = arr.length;
for (int i=0; i<n; ++i)
System.out.print(arr[i] + " ");
System.out.println();
}

public static void main(String args[])
{
Sort b = new Sort();
int arr[] = {5,12,14,6,78,19,1,23,26,35,37,7,52,86,47};
b.bubbleSort(arr);
System.out.println("Sorted array");
b.printArr(arr);
}
}

```

```
package com.cap;

public class Search {

    public static void main(String[] args) {

        int[] arr= {5,12,14,6,78,19,1,23,26,35,37,7,52,86,47};

        int element=19;

        int pos=-1;

        for(int i=0;i<arr.length;i++) {

            if(arr[i]==element) {

                pos=i;

                break;

            }

        }

        if(pos==-1) {

            System.out.println("&quot;Not Found&quot;");

        }

        else {

            System.out.println(element+"&quot; found at position &quot;+pos);

        }

    }

}
```