#Task 01

import java.util.Scanner;

public class A4T1{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Enter your favourite car's name");

String car=sc.nextLine();

System.out.println("enter the times");

int num=sc.nextInt();

for(int i=1; i<=num; i++)

System.out.println(car);

sc.close();

}

}

#Task 02

public class A4T2{

public static void main(String[]args){

System.out.println("Odd numbers between 10 and 50 are");

for(int i=10; i<=50; i++ ){

if(i%2!=0)

System.out.println(i);

}

}

}

#Task 03

import java.util.Scanner;

public class A4T3{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the number");

int num=sc.nextInt();

int max=num, sum=num;

for (int i=2; i<=7; i++){

System.out.println("Please, enter the next number");

num=sc.nextInt();

sum+=num;

if(num>max)

max=num;

}

double avg=sum/7.0;

System.out.println("Average is "+avg);

System.out.println("Maximum number is "+max);

sc.close();

}

}

#Task 04

import java.util.Scanner;

public class A4T4{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

int sum=0;

double count=0;

for(int i=1; i<=8; i++){

System.out.println("Please, enter the number");

int num=sc.nextInt();

if(num%2==0){

sum+=num;

int min=num;

count=1;

for(i=i+1; i<=8; i++){

System.out.println("Please, enter the number");

num=sc.nextInt();

if(num%2==0){

count++;

sum+=num;

if(num<min)

min=num;

}

}

double avg=sum/count;

System.out.println("Average is "+avg);

System.out.println("Minimum number is "+min);

}

}

if(count==0)

System.out.println("You haven't enter a single even number");

sc.close();

}

}

#Task 05

import java.util.Scanner;

public class A4T5{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Enter the value of N");

int n=sc.nextInt();

int sum=0;

for(int i=1; i<=n; i++){

sum=sum+i\*i\*i;

}

double Y=Math.pow(sum,1.0/3);

System.out.println("The value of Y is "+Y);

sc.close();

}

}

#Task 06

import java.util.Scanner;

public class A4T6{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Enter the value of N");

int n=sc.nextInt();

int Y=0;

for(int i=1; i<=n; i++){

if(i%2==0)

Y-=i\*i;

else

Y+=i\*i;

}

System.out.println("The value of Y is "+Y);

sc.close();

}

}

#Task 07

public class A4T7{

public static void main(String[]args){

int sum=0;

for(int i=1; i<=600; i++){

if(i%7==0 && i%9==0)

sum+=i;

}

System.out.println("Sum of the numbers that are multiples of both 7 and 9 up to 600 is "+sum);

}

}

#Task 08

public class A4T8{

public static void main(String[]args){

int sum=0;

for(int i=1; i<=600; i++){

if(i%7==0 || i%9==0)

sum+=i;

}

System.out.println("Sum of the numbers that are multiples of either 7 or 9 up to 600 is "+sum);

}

#Task 09

public class A4T9{

public static void main(String[]args){

int sum=0;

for(int i=1; i<=600; i++){

if((i%7==0 && i%9!=0)||(i%7!=0 && i%9==0))

sum+=i;

}

System.out.println("Sum of the numbers that are multiples of either 7 or 9 but not both, up to 600 is "+sum);

}

}

#Task 10

import java.util.Scanner;

public class A4T10{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

int sum=0;

double c=0;

for(int i=1; i<=10; i++){

System.out.println("Enter the a number");

int n=sc.nextInt();

if(n%2!=0){

sum=sum+n;

c++;

}

}

if(c>0){

double avg=sum/c;

System.out.println("Total is "+sum);

System.out.println("Average is "+avg);

}else

System.out.println("You haven't enter a single odd number");

sc.close();

}

}

#Task 11

import java.util.Scanner;

public class A4T11{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

int sum=0;

double c=0;

for(int i=1; i<=10; i++){

System.out.println("Enter the a number");

int n=sc.nextInt();

if(n%2==0){

sum=sum+n;

c++;

}

}

if(c>0){

double avg=sum/c;

System.out.println("Total is "+sum);

System.out.println("Average is "+avg);

}else

System.out.println("You haven't enter a single even number");

sc.close();

}

}

#Task 12

import java.util.Scanner;

public class A4T12{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

int sum=0;

double c=0;

for(int i=1; i<=10; i++){

System.out.println("Enter the a number");

int n=sc.nextInt();

if(n%4==0){

sum=sum+n;

c++;

}

}

if(c>0){

double avg=sum/c;

System.out.println("Total is "+sum);

System.out.println("Average is "+avg);

}else

System.out.println("You haven't enter a single number that is multiple of 4");

sc.close();

}

}

#Task 13

import java.util.Scanner;

public class A4T13{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Enter the value of N");

int n=sc.nextInt();

int sum=0;

for(int i=1; i<=n; i++){

if(i%2!=0)

sum+=i;

}

System.out.println("Sum is "+sum);

sc.close();

}

}

#Task 14

import java.util.Scanner;

public class A4T14{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Enter the quantity");

int quan=sc.nextInt();

int pro=1;

for(int i=1; i<=quan; i++){

System.out.println("Enter the number");

int num=sc.nextInt();

pro\*=num;

}

System.out.println("Product is "+pro);

sc.close();

}

}

#Task 15

import java.util.Scanner;

public class A4T15{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

int sum=0;

for(int i=1; i<=20; i++){

System.out.println("Please, enter a number");

int num=sc.nextInt();

sum+=num;

System.out.println("Sum of the first "+i+" number(s) are "+sum);

}

sc.close();

}

}

#Task 16

import java.util.Scanner;

public class A4T16{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the mark of a course");

int mark=sc.nextInt();

int sum=mark, max=mark, min=mark;

for(int i=2; i<=10; i++){

System.out.println("Please, enter the mark of another course");

mark=sc.nextInt();

sum+=mark;

if(mark>max)

max=mark;

else if(mark<min)

min=mark;

}

double avg=sum/10.0;

System.out.println("Maximum mark is "+max);

System.out.println("Minimum mark is "+min);

System.out.println("Average is "+avg);

sc.close();

}

}

#Task 17

public class A4T17{

public static void main(String[]args){

System.out.println("All Fibonacci numbers that are less than 1600 are");

int n1=0, n2=1;

int temp;

for(n2=n2;n2<=1600;n2=n1+temp){

System.out.print(n1+", ");

temp=n1;

n1=n2;

}

System.out.println(n1);

}

}

#Task 18

import java.util.Scanner;

public class A4T18{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter a number");

int num=sc.nextInt();

int c=0;

if(num==0)

c=1;

else{

for(num=num;num>0;num/=10){

c++;

}

}

System.out.println("There are "+c+" digit(s) in the number");

sc.close();

}

}

#Task 19

import java.util.Scanner;

public class A4T19{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the power");

int pow=sc.nextInt();

double pro=1.0;

if(pow<0){

for(int i=-1; i>=pow; i--){

pro=pro/10;

}

}else{

for(int i=1; i<=pow; i++){

pro=pro\*10;

}

}

System.out.println(pro);

sc.close();

}

}

#Task 20

import java.util.Scanner;

public class A4T20{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the number");

int num=sc.nextInt();

if(num==0)

System.out.println(num);

else{

int rim;

for(num=num; num>0; num=num/10){

rim=num%10;

if (num/10>0)

System.out.print(rim+", ");

else

System.out.println(rim);

}

}

sc.close();

}

}

#Task 21

import java.util.Scanner;

public class A4T21{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the number");

int num=sc.nextInt();

if(num==0)

System.out.println(num);

else{

int c=10;

for(c=c; num/c>0; ){

c=c\*10;

}

c=c/10;

int s;

for(c=c; c>0; c/=10){

s=num/c;

num=num%c;

if(c/10>0)

System.out.print(s+", ");

else

System.out.println(s);

}

}

sc.close();

}

}

#Task 22

import java.util.Scanner;

public class A4T22{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter a number between 0 and 9");

int num=sc.nextInt();

if(num==0)

System.out.println("Zero");

else if(num==1)

System.out.println("One");

else if(num==2)

System.out.println("Two");

else if(num==3)

System.out.println("Three");

else if(num==4)

System.out.println("Four");

else if(num==5)

System.out.println("Five");

else if(num==6)

System.out.println("Six");

else if(num==7)

System.out.println("Seven");

else if(num==8)

System.out.println("Eight");

else if(num==9)

System.out.println("Nine");

else

System.out.println("Invalid input");

sc.close();

}

}

#Task 23

import java.util.Scanner;

public class A4T23{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the number");

int num=sc.nextInt();

if(num==0)

System.out.println("Zero");

else{

int c=10;

for(c=c; num/c>0; ){

c=c\*10;

}

c=c/10;

int s;

for(c=c; c>0; c/=10){

s=num/c;

num=num%c;

if(c/10>0){

if(s==0)

System.out.print("Zero, ");

else if(s==1)

System.out.print("One, ");

else if(s==2)

System.out.print("Two, ");

else if(s==3)

System.out.print("Three, ");

else if(s==4)

System.out.print("Four, ");

else if(s==5)

System.out.print("Five, ");

else if(s==6)

System.out.print("Six, ");

else if(s==7)

System.out.print("Seven, ");

else if(s==8)

System.out.print("Eight, ");

else

System.out.print("Nine, ");

}else{

if(s==0)

System.out.println("Zero");

else if(s==1)

System.out.println("One");

else if(s==2)

System.out.println("Two");

else if(s==3)

System.out.println("Three");

else if(s==4)

System.out.println("Four");

else if(s==5)

System.out.println("Five");

else if(s==6)

System.out.println("Six");

else if(s==7)

System.out.println("Seven");

else if(s==8)

System.out.println("Eight");

else if(s==9)

System.out.println("Nine");

}

}

}

sc.close();

}

}

#Task 24

import java.util.Scanner;

public class A4T24{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the number");

int num=sc.nextInt();

for(int i=1; i<=num; i++){

if(i!=num)

System.out.print(i+", ");

else

System.out.println(i);

}

sc.close();

}

}

#Task 25

import java.util.Scanner;

public class A4T25{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the number");

int num=sc.nextInt();

int count=0;

for(int i=1; i<=num; i++){

if(num%i==0)

count++;

}

System.out.println("The number of factors of the given number is "+count);

sc.close();

}

}

#Task 26

import java.util.Scanner;

public class A4T26{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the number");

int num=sc.nextInt();

int count=0;

for(int i=1; i<=num; i++){

if(num%i==0)

count++;

}

if(count==2)

System.out.println("Prime number");

else

System.out.println("Not prime number");

sc.close();

}

}

#Task 27

public class A4T27{

public static void main(String[]args){

int temp=0;

System.out.println("Prime numbers less than 1000 are");

for(int num=1; num<=1000; num++){

int count=0;

for(int i=1; i<=num; i++){

if(num%i==0)

count++;

}

if(count==2){

if(temp!=0)

System.out.print(temp+", ");

temp=num;

}

}

System.out.println(temp);

}

}

#Task 28

import java.util.Scanner;

public class A4T28{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the number");

int num=sc.nextInt();

int sum=0;

for(int i=1; i<=num; i++){

if(num%i==0)

sum+=i;

}

System.out.println("Sum of the factors are "+sum);

sc.close();

}

}

#Task 29

import java.util.Scanner;

public class A4T29{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the number");

int num=sc.nextInt();

int sum=0;

for(int i=1; i<=num/2; i++){

if(num%i==0)

sum+=i;

}

if(sum==num)

System.out.println(num+" is a perfect number");

else

System.out.println(num+" is not a perfect number");

sc.close();

}

}

#Task 30

import java.util.Scanner;

public class A4T30{

public static void main(String[]args){

Scanner sc=new Scanner(System.in);

System.out.println("Please, enter the firt value of the range");

int range1=sc.nextInt();

System.out.println("Please, enter the last value of the range");

int range2=sc.nextInt();

int pri=0, per=0;

for(int num=range1; num<=range2; num++){

int count=0, sum=0;

for(int i=1; i<=num/2; i++){

if(num%i==0){

sum+=i;

count++;

}

}

if(sum==num && sum!=0)

per++;

if(count==1)

pri++;

}

System.out.println("Between "+range1+" and "+range2+",");

System.out.println("Found "+pri+" prime number(s)");

System.out.println("Found "+per+" perfect number(s)");

sc.close();

}

}