LAB-1

public class SumOfCubes {

public static void main(String args[])

{

int n=12345;

SumOfCubes sumofcubes=new SumOfCubes();

System.out.println(sumofcubes.sumOfCubes(n));

}

public int sumOfCubes(int n)

{

int s=0;

while(n!=0)

{

s=s+(int)Math.pow(n%10,3);

n=n/10;

}

return s;

}

}

public class Fibonacci {

public static void main(String args[])

{

int first=1,second=1,number=10,i=0;

while(i<number)

{

int temp=first+second;

first=second;

second=temp;

System.out.println(first+" ");

i++;

}

}

}

public class PrimeNumbers {

public static void main(String args[])

{

int number=100,flag=0;

for(int i=2;i<number;i++)

{

flag=0;

for(int j=2;j<=i/2;j++)

{

if(i%j==0)

{

flag=1;

break;

}

}

if(flag==0||i==2||i==3)

{

System.out.println(i);

}

}

}

}

public class CalculateDifference {

public static void main(String[] args) {

// TODO Auto-generated method stub

int k=0;

int number=10;

CalculateDifference calculatorDifference=new CalculateDifference();

System.out.println(calculatorDifference.differnce(number));

}

public int differnce(int number)

{

//System.out.println(k);

int square=0,totalSquare=0;

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

{

square=square+(int)Math.pow(i, 2);

totalSquare=totalSquare+i;

}

System.out.println(square+" "+totalSquare);

int output=square-(int)(Math.pow(totalSquare,2));

return output;

}

}

public class CheckNumber {

public static void main(String args[])

{

int number=8;

CheckNumber check=new CheckNumber();

if(check.checkNumber(number))

{

System.out.println("ok..");

}

else

{

System.out.println("not okk..");

}

}

public boolean checkNumber(int number)

{

if(number%2==0)

{

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

{

if((int)(Math.pow(2, i))==number)

{

return true;

}

}

}

return false;

}

}

public class IncreasingNumber {

public static void main(String args[])

{

int number=134968;

IncreasingNumber increase=new IncreasingNumber();

if(increase.checkNumber(number))

{

System.out.println("Increasing");

}

else

{

System.out.println("Not Increasing");

}

}

public boolean checkNumber(int number)

{

String checkNum=Integer.toString(number);

int count=0;

for(int i=1;i<checkNum.length();i++)

{

if((checkNum.charAt(i-1)-'0')<(checkNum.charAt(i)-'0'))

{

count++;

}

else

{

break;

}

}

if(count==checkNum.length()-2)

{

return true;

}

else

{

return false;

}

}

}

public class CalculateSumOfnNaturalNumbers {

public static void main(String args[])

{

int number=100;

CalculateSumOfnNaturalNumbers Sumofnnumbers=new CalculateSumOfnNaturalNumbers();

System.out.println(Sumofnnumbers.calculateSum(number));

}

public int calculateSum(int number)

{

int sum=0;

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

{

if(i%3==0||i%5==0)

{

sum=sum+i;

}

}

return sum;

}

}