2)Input :  Number  
Output :    
Previous Prime Number  
Next Prime Number

REQUIREMENTS

Input number is assumed to be an integer.

User should enter a valid integer.

TEST CASES

Input- 10

Previous prime no-7

Next prime no-11

Input-6

Previous prime no.-5

Next prime no-7

PROGRAM

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

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

int num=sc.nextInt();

int prevnumber=prev(num);

int nextnumber=next(num);

System.out.println("the previous number is: "+prevnumber);

System.out.println("the next number is: "+nextnumber);

}

public static int prev(int num){

int prev=num-1;

while(!isprime(prev)){

prev--;

}

return prev;

}

public static int next(int num){

int next=num+1;

while(!isprime(next)){

next++;

}

return next;

}

public static boolean isprime(int num){

if(num<=1){

return false;

}

else{

for(int i=2;i\*i<=num;i++){

if(num%i==0)

return false;

}

}

return true;

}

}

OUTPUT

