Assignment-6

Name:

Reg.No:

Slot:

Code:

import java.lang.Math;  
class Main{  
 public void method1(int n){  
 int count=0;  
 int turn=0;  
 double now = System.*currentTimeMillis*();  
 System.*out*.println("METHOD : 1 \n");  
 for(int i=1;i<=n;i++){  
 turn++;  
 if(n%i==0){  
 count++;  
 System.*out*.println(i+" a factor & count is : "+ count);  
 }  
 }  
 System.*out*.println("no. of times checked: "+ turn);  
 if(count==2){  
 System.*out*.println(n+" is prime number\n");  
 }  
 else  
 System.*out*.println("n is not prime\n");  
 System.*out*.println("Run Time: " + (System.*currentTimeMillis*() - now) + "seconds");  
 }  
 public void method2(int n){  
 int count=0;  
 int turn=0;  
 double now = System.*currentTimeMillis*();  
 System.*out*.println("\nMETHOD : 2 \n");  
 for(int i=1;i<=n/2;i++){  
 turn++;  
 if(n%i==0){  
 count++;  
 System.*out*.println(i+" is a factor & count is : "+ count);  
 }  
 }  
 System.*out*.println("no. of times checked: "+ turn);  
 if(count==1){  
 System.*out*.println(n+" is prime number\n");  
 }  
 else  
 System.*out*.println("n is not prime\n");  
 System.*out*.println("Run Time: " + (System.*currentTimeMillis*() - now) + "seconds");  
 }  
 public void method3(int n){  
 int count=0;  
 int turn=0;  
 double now = System.*currentTimeMillis*();  
 System.*out*.println("\nMETHOD : 3 \n");  
 for(int i=1;i<=Math.*sqrt*(n);i++){  
 turn++;  
 if(n%i==0){  
 count++;  
 System.*out*.println(i+" is a factor & count is : "+ count);  
 }  
 }  
 System.*out*.println("no. of times checked: "+ turn);  
 if(count==1){  
 System.*out*.println(n+" is prime number\n");  
 }  
 else  
 System.*out*.println("n is not prime\n");  
 System.*out*.println("Run Time: " + (System.*currentTimeMillis*() - now) + "seconds");  
 }  
 public static void main(String args[]){  
 int a=173;  
 Main obj = new Main();  
 obj.method1(a);  
 obj.method2(a);  
 obj.method3(a);  
 }  
}

Output:

