**LEAST COMMOM MULTIPLE:**

**PROGRAM:**

**package hcf;**

**public class Lcm {**

**public static int F\_lcm(int a , int b) {**

**int cm=0;**

**int grst=(a>b)?a:b;**

**for(int i=grst;i<=a\*b;i++) {**

**if(i%a==0 && i%b==0) {**

**cm=i;**

**break;**

**}**

**}**

**return cm;**

**}**

**public static void main(String[] args) {**

**int a=6;**

**int b=8;**

**int lcm=*F\_lcm*(a,b);**

**System.*out*.println("The LCM value is " + lcm);**

**}**

**}**

**OUTPUT:**

**The LCM value is 24**

**PRIME NUMBER:**

**PROGRAM:**

**package hcf;**

**public class PrimeNumber {**

**public static int C\_factor(int num) {**

**int count=0;**

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

**if(num%i==0) {**

**count++;**

**}**

**}**

**return count;**

**}**

**public static void main(String[] args) {**

**int num=7;**

**int factor=*C\_factor*(num);**

**if(factor==2) {**

**System.*out*.println("It is a prime number");**

**}**

**else {**

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

**}**

**}**

**}**

**OUTPUT:**

**It is a prime number**

**PRIME NUMBER FOR 1 TO 100 VALUES:**

**PROGRAM:**

**package hcf;**

**public class PrimeNumber {**

**public static int C\_factor(int num) {**

**int count=0;**

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

**if(num%i==0) {**

**count++;**

**}**

**}**

**return count;**

**}**

**public static void main(String[] args) {**

**for(int k=1;k<=10000;k++) {**

**int factor=*C\_factor*(k);**

**if(factor==2) {**

**System.*out*.println(k);**

**}**

**}**

**}**

**}**

**OUTPUT:**

**2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97**

**FIBANACCI NUMBERS:**

**PROGRAM:**

**package hcf;**

**public class FibanaccciNumber {**

**public static void main(String[] args) {**

**int res=0;**

**int a =0;**

**int b=1;**

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

**System.*out*.println(a);**

**res=a+b;**

**a=b;**

**b=res;**

**}**

**}**

**}**

**OUTPUT:**

**0**

**1**

**1**

**2**

**3**

**5**

**8**

**13**