

Prime Number

=====

```
class primeexample
{
public static void main(String[]args)
{
int num=4;
boolean flag=false;
for(int i=2;i<=num/2;i++)
{
if(num%i==0)
{
flag=true;
break;
}
}
//System.out.println(!flag);
if(!flag)
{
System.out.println(num+"is a prime number");

}
else
{
System.out.println(num+"is a not prime number");
}
}
```

```
}  
}
```

GCD of 2 Numbers

```
import java.util.Scanner;  
  
class gcdexample  
{  
    public static void main(String[]args)  
    {  
        int num1,num2,gcd=1;  
        Scanner sc=new Scanner(System.in);  
        System.out.println("Enter first Number");  
        num1=sc.nextInt();  
        System.out.println("Enter Second Number");  
        num2=sc.nextInt();  
        for(int i=1;i<=num1 && i<=num2;++i)  
        {  
            if(num1%i==0 && num2%i==0)  
            {  
                gcd=i;  
            }  
        }  
        System.out.println("GCD of"+num1+"and"+num2+"is"+gcd);  
    }  
}
```

LCM & GCD

```
import java.util.Scanner;  
  
class lcmexample  
{
```

```
public static void main(String[]args)
{
int num1,num2,gcd=1,lcm=1;
Scanner sc=new Scanner(System.in);
System.out.println("Enter first Number");
num1=sc.nextInt();
System.out.println("Enter Second Number");
num2=sc.nextInt();
for(int i=1;i<=num1 && i<=num2;++i)
{
if(num1%i==0 && num2%i==0)
{
gcd=i;
}
lcm=(num1*num2)/gcd;
}
System.out.println("GCD of"+num1+"and"+num2+"is"+gcd);
System.out.println("LCM of"+num1+"and"+num2+"is"+lcm);
}
}
```

```
import java.util.Scanner;
class FACTORIAL
{
public static void main(String[]args)
{
int num1,fact=1;
Scanner sc=new Scanner(System.in);
System.out.println("Enter first Number");
```

```
num1=sc.nextInt();
```

```
for(int i=1;i<=num1;++i)
```

```
{
```

```
fact=fact*i;//24
```

```
}
```

```
System.out.println("Factorial Of"+num1+"is"+fact);
```

```
}
```

```
}
```
