

**Lab Goal :** This lab was designed to teach you how to use for loops and as a review of mod %.

**Lab Description :** Take any number and determine if it is prime. A prime number is only divisible by itself and 1. For instance, 7 is prime because it is only evenly divisible by 1 and 7 ( itself ). 8 is not prime because it has the divisors : 1,2,4,8

**Sample Data :**

24  
7  
100  
113  
65535  
2  
7334  
7919  
1115125003

**Files Needed ::**

Prime.java  
Lab08i.java

**Sample Output :**

24 is not prime.  
  
7 is prime.  
  
100 is not prime.  
  
113 is prime.  
  
65535 is not prime.  
  
2 is prime.  
  
7334 is not prime.  
  
7919 is prime.  
  
1115125003 is not prime.

**algorithm help**

```
loop from 2 to square root of number
{
    if( number is evenly divisible by any
        number less than number )
    {
        //get here then number is not prime
    }
}
//made it this far then number is prime
```