

```

// save this number in varibale
int r0 = num1 ;
int r1 = num2 ;
// q1 is the qoution
int q = r0 / r1 ;
int r2 = r0 % r1 ;
int s2 , t2 ;
while ( r2 > 0 )
{
    s2 = s0 - (s1 * q) ;
    s0 = s1 ;
    s1 = s2 ;

    t2 = t0 - (t1 * q) ;
    t0 = t1 ;
    t1 = t2 ;

    r0 = r1 ;
    r1 = r2 ;

    q = r0 / r1 ;
    r2 = r0 % r1 ;
}

```

### اختبار أوليه العدد باستخدام Trial Division

```

bool isPrime (int n )
{
    for (int i=2 ; i<= sqrt(n) ; i++)
        if ( n%i == 0 )
            return false;

    // it's prime number
    return true;
}

```

### التعامل مع اللوغريتم

```

double log10 (double x)
{
    double r = log(x) / log(10.0);
    return r ;
}

double log2 (double x)
{
    double r = log(x) / log(2.0) ;
    return r ;
}

double log10ToLog2 (double log10 )
{
    double r = log10 * 3.322 ;
    return r ;
}

```