

## Assignment - 11

1. #include <stdio.h>

int main()

int LCM (int , int );

int main( )

{

int x, y, z;

printf("Enter two Numbers\n");

scanf("%d %d", &x, &y);

z = LCM (x, y);

printf("LCM is %d", z);

return 0;

}

int LCM (int a, int b)

{

int L;

for (L = a > b ? a : b; L <= a \* b; L++)

{

if (L % a == 0 && L % b == 0)

{

break;

}

}

return L;

}

2. #include <stdio.h>  
int HCF ( int , int );  
int main ( )

{

int x, y, z;  
printf("Enter two numbers");  
scanf("%d %d", &x, &y);  
z = HCF (x, y);  
printf ("HCF = %d", z);  
return 0;

}

int HCF ( int a, int b )

{

int H;

for ( H = a < b ? a : b ; H >= 1 ; H-- )

{

if ( a % H == 0 && b % H == 0 )

{

break;

}

return H;

}

3.

```
#include <stdio.h>
int isprime( int );
```

int main( )

{

    int x, y;

    printf("Enter a number");

    scanf("%d", &x);

    y = isprime(x);

    if (y == 1)

        printf(" prime");

    else

        printf(" Not prime");

    return 0;

}

int isprime( int m )

{

    int i, flag = 0;

    for (i=2; i<=m/2; i++)

{

        if (m % i == 0)

{

            flag = 1;

            break;

}

}

    if (flag == 0)

        return 1;

else

return 0;

}

7 #include<stdio.h>

int fib(int m)

void fib(int m);

int main()

{

int x;

printf("Enter a number\n");

scanf("%d", &x);

fib(x);

return 0;

}

void fib(int m)

{

int i, curr = 0, prev = 1, next = 0;

for(i=1; i<=m; i++)

{

next = curr + prev;

printf("%d", next);

prev = curr;

curr = next;

}

}

9- #include <stdio.h>  
void square(int);

S int main( )

int x;  
printf ("Enter a number\n");  
scanf ("%d", &x);  
square(x);  
return 0;

3

void square(int n)

S printf ("Square is %d", n\*n);

3

6- #include <stdio.h>

void prime(int, int);

S int main( )

int x, y;  
printf ("Enter two Numbers\n");  
scanf ("%d %d", &x, &y);  
prime(x, y);  
return 0;

3

```
void prime( int m1, int m2 )
```

{

```
    int i, flag = 0, n;
```

```
    for( m = m1; m <= m2; m++ )
```

{

```
        flag = 0;
```

```
        for( i = 2; i <= m / 2; i++ )
```

{

```
            if( m % i == 0 )
```

```
                flag = 1;
```

}

```
        if( flag == 0 )
```

```
            printf( "%d", m );
```

}

4. #include <stdio.h>

```
int nextprime( int m );
```

```
int main()
```

{

```
    int x, y;
```

```
    printf( "Enter a Number\n" );
```

```
    scanf( "%d", &x );
```

```
    y = nextprime( x );
```

```
    printf( "%d", y );
```

```
    return 0;
```

}

int nextprime ( int n )

int i, n, flag = 0

for ( n = n ; i < n + 1 ; i++ )

flag = 0;

for ( i = 2 ; i <= n / 2 ; i++ )

{

if ( n % i == 0 )

flag = 1;

}

if ( flag == 0 )

{

return n;

}

3

3

5. #include <stdio.h>

int main(

void primeN ( int ) ;

int main( )

{

int a;

printf("Enter a number \n");

scanf ("%d", &a);

primeN(a);

return 0;

3

```
void primeN(int n)
```

{

```
    int i, x = 2
```

{

```
    for (i=2; i<x; i++)
```

{

```
        if (x % i == 0)
```

```
            break;
```

{

```
    if (i == x)
```

{

```
        printf("%d", x);
```

```
        n--;
```

{

```
        x++;
```

{

{