

Assignment - 11

①

```
#include <stdio.h>
#include <conio.h>
int lcm(int x, int y);
```

```
int main()
```

```
{
    int a, b;
```

```
    printf("Enter two numbers");
    scanf("%d %d", &a, &b);
```

```
    printf
    printf("LCM = %d", lcm(a, b));
    return 0;
```

```
}
```

```
int lcm(int x, int y)
```

```
{
    int i, m, p;
```

```
    if (x > y)
```

```
        c = x
```

```

else
    c=y;
for(i=1; i<=c; i++)
{
    If (a%i==0 && b%i==0)
        m=i;
}
p = (x*y)/m;
return p;
}

```

②

```

#include <stdio.h>
#include <conio.h>
int HCF(int x, int y);
int main()
{
    int a, b;
    printf("Enter the number");
    scanf("%d %d", &a, &b);
    printf("HCF = %d", HCF(a, b));
    return 0;
}

int HCF(int x, int y)
{
    int c, i, m;
    If (x > y)
        c = x;

```

else

$c = y;$

for ($i = 1; i \leq c; i++$)

{

if ($x \% i == 0$ && $y \% i == 0$)

$m = i;$

}

return(m);

}

③ ~~##~~ include <stdio.h>

~~##~~ include <conio.h>

int prime(int n);

int main()

{

int n;

printf("Enter a number");

scanf("%d", &n);

printf("%d\n", prime(n));

if (prime == 1)

printf("prime number");

else printf("Not prime number");

return 0;

}

int prime(int n)

{


```

int i;
for (i = 2; i <= n-1; i++)
    If (n % i == 0)
        break;
    If (i == n)
        return 1;
    else
        return 0;
}

```

④

```

#include <stdio.h>
#include <conio.h>
int prime(int x);
int main()
{
    int n;
    printf("Enter a number");
    scanf("%d", &n);
    printf("Next prime = %d", prime(n));
    return 0;
}

int prime(int x)
{
    int i;
    for (i = 1 2; i <= (x+20); i++)
    {
        for (j = 2; j < i; j++)
        {
            If (i % j == 0)
                break;
        }
    }
}

```

```
# (j == i)
```

```
return(i);
```

```
break;
```

```
}
```

```
}
```

```
}
```

```
⑤ #include <conio.h>
```

```
#include <conio.h>
```

```
void prime(int x);
```

```
int main()
```

```
{
```

```
int n;
```

```
printf("Enter a number");
```

```
scanf("%d", &n)
```

```
prime(n);
```

```
return 0;
```

```
}
```

```
int
```

```
void prime(int x)
```

```
{
```

```
int i, j
```

```
for (i = 1; i <= x; i++)
```

```
{ for (j = 2; j < i; j++)
```

```
{
```

if (i%j == 0)
break;

if (j == i)
printf("%d", i);

⑥ #include <stdio.h>
#include <conio.h>
void prime(int x, int y);
int main()
{
int a, b;
printf("Enter a number a and b");
scanf("%d %d", &a, &b);
prime(a, b);
return 0;
}
void prime(int x, int y)
{
int i, j;
for (i = a; i <= b; i++)
{
for (j = 2; j <= b; j++)
{
if (i%j == 0)
break;
}
if (j == i)
printf("%d", i);
}
}


```
⑦ #include <stdio.h>
#include <conio.h>
void fabona (int m);
int main()
```

```
{
    int n;
    printf("Enter a number");
    scanf("%d", &n);
    fabona(n);
    return 0;
}
```

```
void fabona (int m)
{
    int i, sum = 0, x = 0, y = 1, temp;
```

```
    if (m == 0)
        printf("0");
```

```
    if (m == 1)
        printf("1");
```

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

```
    {
        sum = x + y;
```

```
        temp = x;
```

```
        x = y;
```

```
        y = sum;
```

```
        printf("%d", sum);
    }
```

⑧ #include <stdio.h>
#include <conio.h>

~~void~~ pascaltri^o(int n);
int fact(int m);
int main()

{ ~~int~~ int ~~z~~ n;
printf("Enter a number");
scanf("%d", &n);
pascaltri^o(n);
return 0;
}

void pascaltri^o(int n)

{
int i, j, m;
for(i=0; i<=n; i++)
{
for(j=0; j<=i; j++)
m = fact(i) / (fact(j) * fact(i-j))
printf("%d", m);
}

int fact(int m)

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

return p;
}


```
⑨ #include <stdio.h>
#include <conio.h>
```

```
void square (int m);
```

```
int main()
```

```
{
```

```
    int n;
```

```
    printf("Enter a number");
```

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

```
    square(n);
```

```
    return 0;
```

```
}
```

```
void square (int m)
```

```
{
```

```
    int p;
```

```
    p = m * m;
```

```
    printf("square = %d", p);
```

```
}
```

```
⑩ #include <stdio.h>
```

```
#include <conio.h>
```

```
int fact (int m);
```

```
int main()
```

```
{
```

```
    int n=5, p, sum=0
```

```
    for (int i=1; i<=5; i++)
```

```
    {
```

```
        p = fact(i) / i
```

sum = sum + p

}
printf("40d", sum);

}

int fact(int m).

{

int temp = 1;

for(int j = 1; j <= m; j++)

temp = temp * j;

return temp;

}