

1. Write a function to calculate LCM of two numbers (TSRS).

```
#include <stdio.h>
int main ()
{
    int i;
    for (i = 2 ; ( i <= a * b ; i++)
    {
        if (
```

2. Write a function to calculate HCF of two numbers (TSRS).

```
#include <stdio.h>
int hcf (int a, int b)
{
    int i, n;
    n = a < b ? a : b;
    for (i = n ; i >= 1 ; i--)
    {
        if (a % i == 0 && b % i == 0)
            return i;
    }
}
```

3. Write a function to check whether a given number is prime or not (TSRS).

```
int prime (int x)
{
    int i;
    for (i = 2 ; i < x ; i++)
    {
```

```

    if (x % i == 0)
    {
        return 0;
    }
    return 1;
}

```

4. Write a <sup>function</sup> ~~program~~ to find the next prime number of a given number. (TSRS)

```

int Prime (int x)
{
    int i; a;
    for i=2 (a=x+1; 1; a++)
    {
        for (i=2; i<a; i++)
        {
for i=2;
            if (x % i == 0)
                break;
        }
        if (a==i)
            return i;
    }
}

```

5. Write a function to print first N Prime number (TSRN)

```

void Prime (int x)
{
    int i;
    for (i=2; i<x; i++)
    {
        if (x % i != 0)
            break;
    }
    if (i==x) (i==x)
        printf ("%d", i);
}

```



6. Write a function to Print all Prime numbers between two given numbers. (TSRN)

```
void Prime (int a, int b)
{
    int i, x;
    for (x = a+1; x < b; x++)
    {
        for (i = 2; i <= x; i++)
        {
            if (x % i == 0)
                break;
        }
        if (i >= x)
            printf ("%d", i);
    }
}
```

7. Write a function to Print first N terms of fibonnn fibonacci series (TSRN)

```
void fibonacci (int n)
{
    int a = -1, b = 1, c;
    while (n)
    {
        c = a + b;
        a = b;
        b = c;
        printf ("%d", c);
        n--;
    }
}
```

8. Write a function to Print PASCAL Triangle. (TSRN).

```
int pascal (int n)
```

```
{
```

```
    int i, j;
```

```
    for (i=0;
```

9. Write a program in C to find the square in any number using the function.

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

```
int main ()
```

```
{
```

```
    int n; scanf;
```

```
    printf ("Enter Number");
```

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

```
    printf ("%d", square (n));
```

```
    return 0;
```

```
}
```

```
int square (int n)
```

```
{
```

```
    int s;
```

```
    s = n * n;
```

```
    return s;
```

```
}
```



10.

Write a program in C to find the sum of the series  $1!/1+2!/2+3!/3+4!/4+5!/5$  using the function.

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

```
int main ()
{
```

```
    int i, sum = 0;
```

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

```
    {
```

```
        sum = sum + fact(i)/i ;
```

```
    }
```

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

```
    return 0;
```

```
int fact (int i)
```

```
{
```

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

```
        fact = fact * i ;
```

```
    return 0;
```

```
}
```