main.c

```c
1  // Online C compiler to run C program online
2  #include <stdio.h>
3
4  int square(int);
5
6  void main()
7  {
8      int num, ans;
9
10     printf("Enter your number:");
11     scanf("%d", &num);
12
13     ans = square(num);
14
15     printf("Square of %d is %d.", num, ans);
16 }
17
18 int square(int n)
19 {
20
21     return(n*n);
22 }
23
```

Output

```
/tmp/GYI3YUshVT.o
Enter your number:4
Square of 4 is 16.
```

```c
1   // Online C compiler to run C program online
2   #include <stdio.h>
3
4   int square(int);
5
6   void main()
7   {
8     int no,factorial;
9
10      printf("Enter a number to calculate it's factorial\n");
11      scanf("%d",&no);
12      factorial=fact(no);
13      printf("Factorial of the num(%d) = %d\n",no,factorial);
14
15  }
16
17  int fact(int n)
18  {
19      int i,f=1;
20      for(i=1;i<=n;i++)
21      {
22          f=f*i;
23      }
24      return f;
25  }
26
```

Output

/tmp/GYI3YUshVT.o
Enter a number to calculate it's factorial
6
Factorial of the num(6) = 720

```c
// Online C compiler to run C program online
#include <stdio.h>

int gcd(int x, int y);
int main()
{
    int num1, num2, hcf, lcm;

    printf("Enter two integer Values:\n");
    scanf("%d %d", &num1, &num2);

    hcf = gcd(num1, num2);
    printf("GCD: %d", hcf);
    printf("\nLCM: %d", (num1 * num2) / hcf);
    return 0;
}

int gcd(int x, int y)
{
    if (y == 0)
    {
        return x;
    }
    else
    {
        return gcd(y, x % y);
    }
}
```

Output

```
/tmp/GYI3YUshVT.o
Enter two integer Values:
20 14
GCD: 2
LCM: 140
```

```c
// Online C compiler to run C program online
#include <stdio.h>
int find_factorial(int);
int main()
{
    int num, fact;
    printf("\nEnter any integer number:");
    scanf("%d",&num);

    fact =find_factorial(num);


    printf("\nfactorial of %d is: %d",num, fact);
    return 0;
}
int find_factorial(int n)
{

    if(n==0)
        return(1);


    return(n*find_factorial(n-1));
}
```

```
/tmp/GYI3YUshVT.o
Enter any integer number:8
factorial of 8 is: 40320
```

```c
// Online C compiler to run C program online
#include <stdio.h>
#include <math.h>
int reverse(int num);
int isPalindrome(int num);

int main()
{
    int num;
    printf("Enter any number: ");
    scanf("%d", &num);

    if(isPalindrome(num) == 1)
    {
        printf("%d is palindrome number.\n", num);
    }
    else
    {
        printf("%d is NOT palindrome number.\n", num);
    }

    return 0;
}
int isPalindrome(int num)
{

    if(num == reverse(num))
    {
        return 1;
```

```
Output

/tmp/GYI3YUshVT.o
Enter any number: 567
567 is NOT palindrome number.
```

```c
18      {
19          printf("%d is NOT palindrome number.\n", num);
20      }
21
22      return 0;
23  }
24  int isPalindrome(int num)
25  {
26
27      if(num == reverse(num))
28      {
29          return 1;
30      }
31
32      return 0;
33  }
34
35
36
37  int reverse(int num)
38  {
39
40      int digit = (int)log10(num);
41      if(num == 0)
42          return 0;
43
44      return ((num%10 * pow(10, digit)) + reverse(num/10));
45  }
46
```

Output

```
/tmp/GYI3YUshVT.o
Enter any number: 567
567 is NOT palindrome number.
```