4. factor of a number.

```
#include <stdio.h>
#include <conio.h>
int main()
{
    int n, i;
    clrscr();
    printf("Enter a number:");
    scanf("%d", &n);
    printf("factors of %d are:", n);
    for(i=1; i<=n; i++)
    {
      if(n%i==0)
    {
     printf("%d,", i);
     }
    }
    getch();
}
```

output:

Enter a number: 12

factors of 12 are: 1 2 3 4 6 12

3. power of a number.

```
#include <stdio.h>
#include<conio.h>
#include <math.h>
int main()
{
    clrscr();
    double base, result;
    int exp;
    printf("Enter base (number):");
    scanf("%f", &base);
    printf("Enter exponent (integer):");
    scanf("%d", &exp);

    result = pow(base, exp);
    printf("%.6g ^ %d = %.6g\n", base, exp, result);
    getch();
}
```

Output:

Enter base (integer): 2

Enter exponent (non-negative integer): 5

2 ^ 5 = 32

2. Factorial of a number

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,i;
    long fact=1;
    clrscr();
    printf("Enter a number:");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
     fact=fact*i;
    }
    printf("factorial of %d=%d",n,fact);
    getch();
}
```

out put:

Enter a number: 5

factorial of 5=120

(1) Find the Nth Term of the Fibonacci series.

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int n, i;
    int a=0; b=1, c;
    clrscr();
    printf("Enter n: ");
    scanf("%d", &n);
    if (n==1)
      printf("The %dth Fibonacci term = %d", n, a);
    else if (n==2)
      printf("The %dth Fibonacci term = %d", n, b);
    else
    {
     for (i=3; i<=n; i++)
     {
       c=a+b;
       a=b;
       b=c;
     }
     printf("The %dth Fibonacci term = %d", n, b);
    }
    getch();
}
```

output:

Enter n:7

The 7th Fibonacci term=8