

```

1  #include<bits/stdc++.h>
2  using namespace std;
3  /*
4      e = 1 + x/1 + x^2/2! + x^3/3! + x^4/4! + .... n-times
5
6      sum(n-1) + n => sum(n) => 1 + 2 + 3 + 4 ..... n-times
7      fact(n-1) * n => fact(n) => 1 * 2 * 3 * 4 .....n-times
8      pow(x, n-1) * x => pow(x, n) => x * x * x * x * .... n-times
9  */
10
11 int e(int x, int n)
12 {
13     static int p = 1, f = 1;
14     int r;
15
16     if(n == 0)
17         return 1;
18     else{
19         r = e(x, n-1); // After assign
20         p = p * x; // mull returning times ... follow like power
21         f = f * n; // mull returning times ... follow like factorial
22
23         return r + p/f;
24     }
25 }
26
27 }
28 int main()
29 {
30     int x, n;
31     x = 2, n = 4;
32
33     cout << e(x, n) << endl;
34
35 }

```