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1: #include<iostream>
2: #include <cmath>
3:
4: using namespace std;
5:
6: double fact(int n);
7: double pow(int x, int n);
8:
9: int main()
10: {
11:     double sum = 0, denominator;
12:     int n, power;
13:
14:     cout<<"Enter n : ";
15:     cin>>n;
16:     for (int i = 1; i <= n; i++)
17:     {
18:         power = (int) log10(i) + 1;
19:         denominator = (pow(10, power) * i + (i + 1));
20:         //forms denominator like in the assignment 12,23,34,45,56,...,1011,
        ...
21:         sum += denominator / fact(i + 1);
22:     }
23:     cout.precision(10);
24:     cout<<"Result : "<<sum<<endl;
25:     cin.ignore(100 , '\n');
26:     cin.get();
27:     return 0;
28: }
29:
30: double fact(int n)
31: {
32:     int result = 1;
33:     for (int i = 2; i <= n; i++)
34:     {
35:         result *= i;
36:     }
37:     return result;
38: }
39:
40: double pow(int x, int n)
41: {
42:     double result = x;
43:     for(int i = 2; i <= n; i++)
44:     {
45:         result *= x;
46:     }
47:     return result;
48: }
49:

```