Write a c program to find the sum of the series 1!/1+2!/2+3!/3+4!/4+5!/5 ...

n!/n by utilizing user defined recursive function? Get the value of n from the

user. Do not use any storage classes. Without returning the calculated result

from the function, display the result in main (10 marks)

#include <stdio.h>

void calculate(int n, double \*sum, double prev\_factorial) {

if (n == 0) {

return;

}

double factorial = 1.0;

for (int i = 1; i <= n; i++) {

factorial \*= i;

}

\*sum += factorial / n;

calculate(n - 1, sum, factorial);

}

int main() {

int n;

printf("Enter the value of n: ");

scanf("%d", &n);

double sum = 0.0;

calculate(n, &sum, 1.0);

printf("Sum of the series: %lf\n", sum);

return 0;

}

