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Write program using recursion for factorial, fibonacci and tower of Hanoi

#include <stdio.h>

int factorial(int n) {

if(n == 0) {

return 1;}

else {

return (n \* factorial(n-1));

}

}

int fibbonacci(int n) {

if(n == 0){

return 0;}

else if(n == 1) {

return 1;}

else {

return (fibbonacci(n-1) + fibbonacci(n-2));

}

}

void hanoi(int n, char from\_rod, char to\_rod, char des\_rod) {

if (n == 1) {

printf("Move disk 1 from rod %c to rod %c\n", from\_rod, to\_rod);

return;

}

hanoi(n - 1, from\_rod, des\_rod, to\_rod);

printf("Move disk %d from rod %c to rod %c\n", n, from\_rod, to\_rod);

hanoi(n - 1, des\_rod, to\_rod, from\_rod);

}

int main() {

int n;

int i;

printf("Enter number:");

scanf("%d",&n);

printf("Factorial of %d: %d\n" , n , factorial(n));

printf("Fibbonacci of %d: " , n);

for(i = 0;i<n;i++) {

printf("%d\n",fibbonacci(i));}

printf("Enter number:");

scanf("%d",&n);

hanoi(n, 'A', 'C', 'B');

return 0;

}

