```
Write a code using reccurssion for factorial, fibbonacci,
29/10/84
     tower of hanoi.
      factorial
      int factorial linto )
         if (n >= 1)
           return n* factorial (n-1);
         else
      fibbonacci (int n)
         CALERBALLI
         if contribution (nz=1)
         return n;
        return (fibonace con 1) + bibbonacei (h-2)).
      Hansi ( int n, char from rod, char to rod, char
       if (n ==1) {
        print ("move disk 1 from rod y, c to rod y, c 10")
            from rod, to rod);
          return.
        hanoi (n-1, from rod, aux rod, to rod);
         puints comove disk y . d from x.c to rod x.c. 10th,
              n brom rod to rod).
        nanoj (n-1, aux, rod, to rod from rod);
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```
# include (stdip.h>
#include < stalib.h>
long factorial (int n);
long hibbonacci (ind n);
void hanoi (in) n, char from rod, char to rod, char aux rod
ind main () {
   int p, i;
  Char chi
  while U) {
 puints ("1: factorial in 2: fib in3. Toh in4: exit in");
 puint (" in enter you choice ");
  Scanb Cuy.c 11, &ch).
  switch (Ch) {
   care (1):
     prints "enter number for factorial:");
         Scanh (4) d 11, 4n).
         prints ("factorial of y.a = y.ld in", n, factorial en))
         break.
   case (2):
         perint (" enter the number of terms: 1,)
           Scarf ("Y.d", In);
           pruint Lu fibbonacu series: ");
           for (i=0; 1/n; i++) {
            perint (" Y.d 1, fibonaci (i));
            perints (41n11);
           break;
 case (3):
            peant 6 C"Enter number of diske: ").
           Scand Cuy.du, .4 n).
            hanoi (n, 'A, B', E').
  case (4): exit (0):
 break;
```

	default: pruint ("wrong input in"); 2
	ouint ("wrong inplu
	7
	3
* M. I	long factorial (int n) f
	long factories
	if (n>=1) retur n + factorial (n-1);
	else
	return 1;
	3
	int hibbonacu (ind n) {
	if (n2=1)
	return n;
	che (12 22)
	return (fibonacci (n-1) + fibbona cci (n-2))
1 / 1	Company of the second s
	Void hanoi (int n, unar from-rod, char to-rod,
	char_aux, rod){
H .	if (n==1) {
	print (u move disk 1 from rod y, c to y, e 104
	from = rod, to_rod);
	return;
	1
1	hanni (D-1)
<u>-</u>	hanoi (n-1, brom-rod, aux_rod, to-rod);
	puints l'amove disk y.d from rod y.c to rod y.c in
	n, from road, to rod);
	hanoi (n-1, aux_rod, to_rod, from rod);
	J

	1: Factorial
	2: Fibbonacci
	3: Tower of handi
	4: exit
	1:
	enter number for factorial 10.
	factorial 06 10 is 362880
	7 - 1 - 1 - 7 - F - 1 - 1
-	2 :
-	enter the number of terms 4
-	Fibbonacu sentes - 0112.
-	
-	3:
	enter the number of disk 3
	move disk I from rod A to Rod C
	move disk 2 brom rod A to Rod B move disk brom rod C to Rod B
-	move dick 3 from rod 4 to Rod C
	move disk I from rod B to Rod A
	move disk from rod B to Rod C
	move disk I from rod A to Rod C.
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