|     | #include Koldio.h)   |
|-----|--|
| A   | icid recursive_toward Hanoi (int n, int from, int to, int aw) {  |
| ),  | H(n=0)   |
| 4   | retion;  |
| S   | recursive tower of Hanvi (n-1, from oux, to);  |
| 7.0 | recursive tower of Hanvi (n-1, from out, to);  print (" Disk 1 d is moved from tower 1 d to 1 d \n", n, from, to);  print (" Disk 1 d is moved from tower 1 d to 1 d \n", n, from, to);  |
| 9   | peausive_towerofHanoi(n-1, aux, to, from);   |
|     | Jan to with the state of the st |
|     | of mark a family and I am the first of the family and the  |
| 5   | int main ()  |
| V   | · 16/16 Entry no. of clary //  |
|     | Scanflet. J. J. (kn);  |
|     | recursive today  |
| 9   |  |
|     | toward Hanoi (n from, to, aux) correctly company to the  |
|     | laim: The recursive town of moving n disks from the from tower to the  |
|     | laim: The recursive—tower of Hanoi (n from, to, aux) correctly computes all the valid moves for moving n disks from the 'from' tower to the all the valid moves for moving n disks from the 'from' tower to the all the valid moves for moving n disks from the 'from' tower to the all the valid moves for moving n disks from the 'from' tower to the to' tower via the 'aux' tower s.t. 1) Only one disk can be moved to 'tower via the 'aux' tower s.t. 1) Only one disk with a smaller  |
|     | to tower via the 'aux' tower sot. 1) only one way was a smaller at a time of No disk can be placed on top of a disk with a smaller at a time of No disks are in order of decreasing diameter as one scans up diameter. The disks are in order of decreasing diameter as one scans up   |
|     | diameter. The disks one in order of decreasing diameter as one   |
|     | diarreter. The disks one in order of decreasing authorized as the tower. The tower. The proof is by mathematical induction on nother notation on nother notation. The proof is by mathematical induction on nother notation on nother notation on nother notation on nother notation.  |
| T   | most: The proof is by mathematical insuction or the la month to we   |
|     | 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |
|     | Proof: The proof is by mathematical vometa.  |
|     | coppletely tour tour form tour form the function   |
|     | correctly return void in line 4.  [I.H.]: For an arbitrary n=0, the recursive—tower of Hanoi () function  [I.H.]: For an arbitrary n=0, the recursive—tower of Hanoi () function   |
|     | correctly computes the value tower (initially 9) via the faur tower (initially   |
|     | I.H. For an arbitrary n=C, the recursive county of the from the from correctly computes the valid moves for moving a dishs from the from towar (initially 1) to the to towar (initially 9) via the faux towar (initially 1) maintaining all the given cords.   |