



National University

of computer and emerging sciences

Task 2 Explanation With Screen-Shots

Task 2 :- Logical output
number disks = 3:
Rod_A = source
Rod_B = destination
Rod_C = Auxiliary / Helping-rod.

Run 1:-

empty empty

1 2 3

A B C

Move 1 :-

3 1 empty

A B C

Move 2:-

3 1 2

A B C

Move 3:-

1 3 2

A B C

Move 4:-

3 1 2

A B C

Move 5:-

1 3 2

A B C

Move 6:-

1 3 2

A B C

Move 7:-

1 3 2

A B C

C:\Users\ahmed\OneDrive\De × + ▾

Enter The Number Of Disks: 3

Move Disk - 1 from Rod - A To Rod - B

Move Disk - 2 from Rod - A To Rod - C

Move Disk - 1 from Rod - B To Rod - C

Move Disk - 3 from Rod - A To Rod - B

Move Disk - 1 from Rod - C To Rod - A

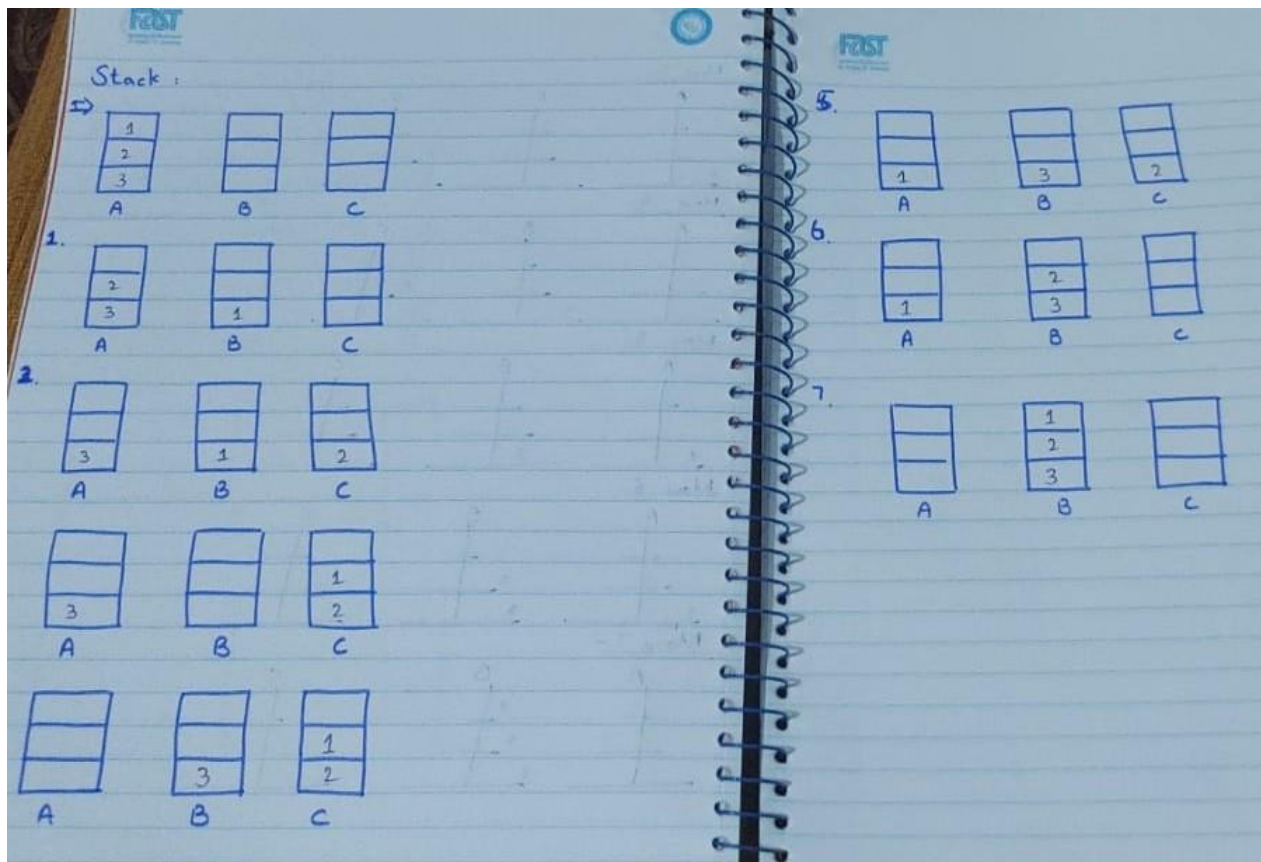
Move Disk - 2 from Rod - C To Rod - B

Move Disk - 1 from Rod - A To Rod - B

Total Moves Required are: 7

Process exited after 4.141 seconds with return value 0

Press any key to continue . . . |



Explanation:

The logic is designed in a way, that there are 3 stacks created in memory, named A,B,C respectively. When the user selects the number of rods, stack A is piled up with disc with size from higher to lower starting from bottom, here in code disc are used as integers, following the game rules now during each move, each top disc is moved either to destination stack (B) or auxiliary stack (C) , Ultimately these shifting will give us all disc on stack B following the same order of arrangement as in stack A. This should sum up the logic in simplest possible way.

