

18/10/23

Problems

Day 27

Q1: Towers of Hanoi

```
ps) SUBPROCEDURE Hanoi ( disk, source, destination,  
                           auxiliary)  
    IF disk == 1 THEN  
        MOVE disk from source to destination  
    ELSE  
        MOVE Hanoi (disk-1, source, auxiliary,  
                      destination)  
        MOVE disk from source to destination.  
        MOVE Hanoi (disk-1, auxiliary, destination,  
                      source).  
    END IF
```

// main

Call Hanoi (3, A, B, C)

PS2 INSERTING A CARD IN A LIST OF SORTED CARDS

READ the list of sorted cards

READ New Card

SET Pos to 0

WHILE (Pos < number of cards) and (CARDS [Pos]
≤ newcard)

INCREMENT Pos

END WHILE

IF Pos < no of Card THEN

INCREMENT number of cards by 1

FOR COUNTER = last position used to pos by -1

SET CARDS [counter + 1] to array CARDS

END FOR [counter]

ENDIF

SET CARDS [Pos] to newcard