CARDIAC

CARD BOARD ILLUSTRATIVE AID TO COMPUTATION

- 100 MEMORY LOCATIONS
  00 - 99

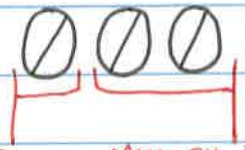
- 1 REGISTER

- 10 INSTRUCTIONS

CODE	ABBREV.	OPERATION
0	INP	READ A CARD INTO MEMORY
1	CLA	CLEAR ACCUMULATOR AND ADD FROM MEMORY
2	ADD	ADD FROM MEMORY INTO ACCUMULATOR
3	TAC	TEST ACCUMULATOR AND JUMP IF NEGATIVE
4	SFT	SHIFT ACCUMULATOR
5	OUT	WRITE MEMORY TO OUTPUT
6	STO	STORE ACCUMULATOR INTO MEMORY
7	SUB	SUBTRACT MEMORY FROM ACCUMULATOR
8	JMP	JUMP TO MEMORY POSITION
9	HRS	HALT & RESET

- A DECK OF CARDS
  - NUMBERS THAT YOU CAN MANIPULATE W/ COMMANDS

COMMANDS



COMMAND
A NUMBER 0-9 CORRESPONDING TO A COMMAND ON THE LIST BEFORE

MEMORY POINT
THE MEMORY POINT THE COMMAND MANIPULATES

EXAMPLES:

810 - JUMP TO MEMORY LOCATION 10

322 - TEST ACCUMULATOR; IF NEGATIVE JUMP TO 22

263 - ADD MEM LOC 63 TO ACCUMULATOR

PROCESS

1) INPUT YOUR COMMANDS INTO THE MEMORY POINTS ONE AFTER ANOTHER LIKE LINES OF CODE
2) LOAD YOUR DECK OF CARDS INTO MEMORY. THESE ARE NUMBERS THAT YOU WANT TO MANIPULATE
3) SET THE PROGRAM COUNTER TO THE MEMORY POINT/COMMAND YOU WANT TO START AT
4) RUN THE PROGRAM. THE PROGRAM WILL STEP THROUGH MEMORY POINTS EXECUTING A COMMAND IN THAT POINT. IT WILL

EXAMPLE

ADD A LIST OF NUMBERS
OUTPUT SUM WHEN -1 IS ENTERED

MEMORY POINTS:

00: 0 : WHERE WE STORE CURRENT NUM BEING ADDED
01: 0 : CURRENT SUM
02: 000 : STORE TOP NUM IN DECK TO 00
03: 100 : CLEAR ACC. ADD NUM IN 00
04: 308 : IF ACC IS NEG, JUMP TO 08, IF POS CONTINUE
05: 201 : ADD 01 TO ACCUMULATOR
06: 601 : STORE THE ACCUMULATOR IN 01 (SUM)
07: 802 : JUMP TO 02
08: 501 : OUTPUT 01 (SUM)
09: 900 : END PROGRAM

PC:	DECK/INPUT/MEMORY:	OUTPUT:
02	1	15
	2	
	3	
	4	
	5	
	-1	