8255 (PPI) + 8086.

To initialize Port A as an input port in mode – 0

PROGRAM:

ADDRESS	OPCODE	MNEMONICS
1100	BE 00 15	MOV SI, 1500H
1103	B0 90	MOV AL, 90
1105	BA50 FF	MOV DX,FF56
1108	EE	OUT DX,AL
1109	BA 50 FF	MOV DX,FF50
110c	EC	IN AL,DX
110d	88 04	MOV [SI],AL
110F	F4	HLT

PROCEDURE:

Enter the program starting from the user Ram address 1100H. Set a known data at the SPDT switches. Execute the program. The above program initializes port A as an input port. The data as set by the SPDT switch settings is input into the accumulator and is stored at the location 1500H. Please verify whether the data at 1500 is the same as that set by SPDT switches.

AIM:

To initialize port C as output port in mode – 0

3m + 8086

STEPPER MOTOR INTERFACE WITH 8086

AIM:

To interface the stepper motor with 8086 trainer kit and To run a stepper motor at different speed in clockwise directions.

PROGRAM:

ADDRESS	OPCODE	MNEMONICS
1100	B0 80	MOV AL,80
1102	BA 36 FF	MOV DX,FF36
1105	EE	OUT DX,AL
1106	BE 00 12	**START :** MOV SI,1200
1109	B3 04	MOV BL,04
110B	8A 04	**REPEAT :** MOV AL,[SI]
110D	BA 30 FF	MOV DX,FF30
1110	EE	OUT DX,AL
1111	E8 07 00	CALL DELAY (111B)
1114	46	INC SI
1115	FE CB	DEC BL
1117	75 F2	JNE REPEAT (110B)
1119	EB EB	JMP START (1106)
111B	B9 03 09	DELAY: MOV CX,0903
111E	49	**LOOP :** DEC CX
111F	75 FD	JNE LOOP (111E)
1121	C3	RET

ORG 9200H

1200 03060C09 DB 03H,06H,0CH,09H

END

RESULT:

8279 (KBD) + 8086 - (1)

1109	F4	HLT

ROLLING DISPLAY

AIM:

To display the rolling message 'HELLO' in the display.

ADDRESS	OPCODE	MNEMONICS
1100	BE 00 12	START:MOV SI,1200
1103	B9 0F 00	MOV CX,000F
1106	B0 10	MOV AL,10
1108	BA 52 FF	MOV DX,FF52
110B	EE	OUT DX,AL
110C	B0 CC	MOV AL,CC
110E	EE	OUT DX,AL
110F	B0 90	MOV AL,90
1111	EE	OUT DX,AL
1112	8A 04	LOP1: MOV AL,[SI]
1114	BA 50 FF	MOV DX,FF50
1117	EE	OUT DX,AL
1118	E8 E5 01	CALL DELAY
111B	46	INC SI

1300

111C	E2 F4	LOOP ~~LOP1~~ 1112
111E	EB E0.	JMP ~~START~~ 1100
1300	BA FF A0	~~DELAY~~:MOV DX,A0FF
1303	4A	DEC DX
1304	75 FD	JNZ ~~1303~~ ~~#FD~~ 1303
1306	C3	RET

LOOK-UP TABLE:-

1200	FFH	FFH	FFH	FFH
1204	FFH	FFH	FFH	FFH
1208	98H	68H	7CH	7CH
120C	0CH	FFH	FFH	FFH

HELLO

mpmc

VI MICROSYSTEM KIT

Procedure to RUN the program in 8085 Microprocessor kit. (SA - 4100)

1. To enter the program:-

   A → Enter → starting address
   → Enter → type the mnemonics code upto HLT (end)
   → Reset

2. To give the Input Data:-

   SU space Input address → Enter
   → give the Input Data. → Reset

3. To execute the program:-

   G space starting address. → Enter.
   → GU execute → Reset.

4. To check the output Results:-

   SU space output address → Enter.
   → check the output.

For 8086 Kit (microprocessor)

① to give the Input data - type SB.
② to execute the program - G10 - starting address. (SA - 1000] 1100]

For 8051 Kit (microcontroller)

① to give the Input data - type SP
② to execute the program - G10 - starting address (SA - 4100]

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mpmc

SASTHA'S KIT

Procedure to RUN the program in SASTHA'S Kit.

1. To enter the program.

   A 1100 (SA) → Enter → type the Mnemonics code upto RET. (end)

   → Reset

2. To give the Input data :-

   M input address → Enter (1) → space (2) → space

   → Reset.

3. To execute the program :-

   G starting address → Enter.

   → Reset

4. To check the output Results :-

   M output address → Enter → o/p.

   → Reset

SA - 8085 - 9100,

8086 - 1100

8051 - 9100.
