NAME: Atharva Kadam REG NO.:RA1911027010086

Section: N2

As I use macOS and EMU8086 doesn't work in the system.

Q1. 8 bit addition using immediate addressing mode

DATA SEGMENT

RES DB?

DATA ENDS

CODE SEGMENT

ASSUME DS:DATA,CS:CODE

START:

MOV AX, DATA

MOV DS,AX

MOV AL,18

MOV BL,47

ADD AL,BL

MOV RES,AL

INT 21H

CODE ENDS

END START

Q2. 8 bit addition using indirect addressing mode

DATA SEGMENT

N1 DB 30h

N2 DB 40h

RES DB?

DATA ENDS

CODE SEGMENT

ASSUME DS:DATA,CS:CODE

START:

MOV AX, DATA

MOV DS,AX

MOV AL,N1

MOV BL,N2

ADD AL,BL

MOV RES,AL

INT 21H

CODE ENDS

END START

Q3. 8 bit addition using direct addressing mode

DATA SEGMENT

RES DB?

DATA ENDS

CODE SEGMENT

ASSUME DS:DATA,CS:CODE

START:

MOV AX,DATA

MOV DS,AX

MOV AL,[0001h]

MOV BL,[0002h]

ADD AL,BL

MOV RES,AL

INT 21H

CODE ENDS

END START

Q4. 8 bit subtraction using immediate addressing mode

DATA SEGMENT

RES DB?

DATA ENDS

CODE SEGMENT

ASSUME DS:DATA,CS:CODE

START:

MOV AX,DATA

MOV DS,AX

MOV AL,44

MOV BL,55

SUB AL,BL

MOV RES,AL

INT 21H

CODE ENDS

END START

Q5. 8 bit subtraction using indirect addressing mode

DATA SEGMENT

N1 DB 30h

N2 DB 12h

RES DB?

DATA ENDS

CODE SEGMENT

ASSUME DS:DATA,CS:CODE

START:

MOV AX, DATA

MOV DS,AX

MOV AL,N1

MOV BL,N2

SUB AL,BL

MOV RES,AL

INT 21H

CODE ENDS

END START

Q6. 8 bit subtraction using direct addressing mode

DATA SEGMENT

RES DB?

DATA ENDS

CODE SEGMENT

ASSUME DS:DATA,CS:CODE

START:

MOV AX,DATA

MOV DS,AX

MOV AL,[0001h]

MOV BL,[0002h]

SUB AL,BL

MOV RES,AL

INT 21H

CODE ENDS

END START