**Q2**

.MODEL SMALL

.STACK 100H

.DATA

MSG\_TICKET DB 'Parking Ticket Issued$', 0

MSG\_INSERT DB 'Insert $', 0

MSG\_MORE DB ' more$', 0

INPUT\_MSG DB 'Enter inserted amount: $', 0

NEWLINE DB 0DH, 0AH, '$'

AMOUNT DB ?

.CODE

MAIN PROC

; Initialize DS

MOV AX, @DATA

MOV DS, AX

MOV DX, OFFSET INPUT\_MSG

MOV AH, 09H

INT 21H

MOV AH, 01H

INT 21H

SUB AL, 30H

MOV BL, AL

MOV AH, 01H

INT 21H

SUB AL, 30H

MOV BH, AL

MOV AL, BL

MOV CL, 10

MUL CL

ADD AL, BH

MOV AMOUNT, AL

MOV DX, OFFSET NEWLINE

MOV AH, 09H

INT 21H

CMP AMOUNT, 100

JGE PRINT\_TICKET

MOV AL, 100

SUB AL, AMOUNT

MOV DX, OFFSET MSG\_INSERT

MOV AH, 09H

INT 21H

MOV AH, 0

AAM

ADD AH, 30H

MOV DL, AH

MOV AH, 02H

INT 21H

ADD AL, 30H

MOV DL, AL

MOV AH, 02H

INT 21H

MOV DX, OFFSET MSG\_MORE

MOV AH, 09H

INT 21H

JMP EXIT

PRINT\_TICKET:

MOV DX, OFFSET MSG\_TICKET

MOV AH, 09H

INT 21H

EXIT:

MOV AX, 4C00H

INT 21H

MAIN ENDP

END MAIN

**Q1**

.MODEL SMALL

.STACK 100H

.DATA

MSG\_TICKET DB 'Parking Ticket Issued$', 0

MSG\_INSERT DB 'Insert $', 0

MSG\_MORE DB ' more$', 0

INPUT\_MSG DB 'Enter inserted amount: $', 0

NEWLINE DB 0DH, 0AH, '$'

AMOUNT DB ?

.CODE

MAIN PROC

; Initialize DS

MOV AX, @DATA

MOV DS, AX

MOV DX, OFFSET INPUT\_MSG

MOV AH, 09H

INT 21H

MOV AH, 01H

INT 21H

SUB AL, 30H

MOV BL, AL

MOV AH, 01H

INT 21H

SUB AL, 30H

MOV BH, AL

MOV AL, BL

MOV CL, 10

MUL CL

ADD AL, BH

MOV AMOUNT, AL

MOV DX, OFFSET NEWLINE

MOV AH, 09H

INT 21H

CMP AMOUNT, 100

JGE PRINT\_TICKET

MOV AL, 100

SUB AL, AMOUNT

MOV DX, OFFSET MSG\_INSERT

MOV AH, 09H

INT 21H

MOV AH, 0

AAM

ADD AH, 30H

MOV DL, AH

MOV AH, 02H

INT 21H

ADD AL, 30H

MOV DL, AL

MOV AH, 02H

INT 21H

MOV DX, OFFSET MSG\_MORE

MOV AH, 09H

INT 21H

JMP EXIT

PRINT\_TICKET:

MOV DX, OFFSET MSG\_TICKET

MOV AH, 09H

INT 21H

EXIT:

MOV AX, 4C00H

INT 21H

MAIN ENDP

END MAIN