CIS240/CNET220 EXERCISE 5

NAME

1. Assemble the **DEBUG** version of the code

MASM Version		DEBUG Version		
PUSH DS	;save Debug return information	0100	PUSH	DS
MOV AX,0		0101	MOV	AX,0000
PUSH AX		0104	PUSH	AX
MOV AX,2000H	;initialize output message seg/offset	0105	MOV	AX,2000
MOV DS,AX		0108	MOV	DS,AX
MOV SI,0		010A	MOV	SI,0000
WAITFORLF:				
MOV AH,01	;01 is read command/w-echo for INT 21H	010D	MOV	AH,01
INT 21H	;read one character from keyboard	010F	INT	21
CMP AL,0DH	;0DH is Carriage Return	0111	CMP	AL,0D
JE DATAENTERED	;if Enter Key pressed jump	0113	JZ	001A
MOV [SI],AL	;else save output to buffer	0115	MOV	[SI],AL
INC SI		0117	INC	SI
JMP WAITFORLF	;get next character	0118	JMP	010D
DATAENTERED:				
MOV AL,20H	;add a space to previous characters	011A	MOV	AL,20
MOV [SI],AL	;save to output buffer	011C	MOV	[SI],AL
INC SI		011E	INC	SI
MOV AH,0	;0 read Display character command/no-echo	011F	MOV	AH,00
INT 16H		0121	INT	16
CMP AL,'D'	;'D' is for display	0123	CMP	AL,44
JE DISPLAYMESSAGE	;if 'D' pressed display and quit	0125	JZ	0129
JMP WAITFORLF	;else get next set of characters	0127	JMP	010D
DISPLAYMESSAGE:				
MOV AL,24h		0129	MOV	AL,24
MOV [SI],AL		012B	MOV	[SI],AL
MOV AH,9H	;9 is the command to display a buffer	012D	MOV	AH,09
MOV DX,0	;this is the offset to the buffer	012F	MOV	DX,0000
INT 21H		0132	INT	21
RETF	;Return to DEBUG program	0134	RETF	

2. Test its operation entering various messages, then displaying them
3. Modify the code so that the message will be displayed when either 'X'(58) OR 'x' is pressed(78)

Instructor Verification _____