;\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

; Function: delay

; Input: unsigned char

; output: void

; description: Preforms a variable delay

;\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

seg CODE

global \_delay: ; unsigned char delay(unsigned char);

;pop the return address off stack (2 bytes)

pop ACC

mov R2,A ; save stack return info

pop ACC

mov R3,A ; save stack return info

;pop variable 'unsigned char' off stack

pop ACC

mov R7,A ; pop our variable off stack into R7

;push the return address back on stack (2 bytes)

mov A,R3

push ACC ; adjust stack for return

mov A,R2

push ACC

;do the delay

clr A ; Clear Accumulator

mov R5,A ; load R5 with A

; Loop

outerloop:

Dec R7

innerloop:

inc R5

cjne R5,#200,innerloop

clr A ; Clear Accumulator

mov R5,A ; load R5 with A

cjne R7,#0,outerloop

; return count to calling function

mov A,R5

mov R1,A ;return value in R1

;done

ret ;return

end