Schuyler Davis

4/13/16

Assignment 4

CS 2700

;Schuyler Davis

; 4/16/2016

;Assignment 4 Stoplight

org 100h

; add your code here

.data

stoplight db 13,10,"What is the color of the stoplight(R/Y/G): $"

char db ?

police db 13,10, "Are there any police cars nearby(Y/N): $"

stop db 13,10, "Stop!$"

drive db 13,10, "Drive normally.$"

speedup db 13,10,"Gun it to get through the intersection $"

invalid db 13,10, "Invalid character$"

letter db ?

.code

proc main

;This will prompt the user

prompt:

mov ah , 09h

mov dx, offset stoplight

int 21h

mov ah, 01h

int 21h

mov char, al

; this is the what would be the if statements in ther code

switch:

cmp char,'R'

je red

cmp char, 'r'

je red

cmp char, 'Y'

je yellow

cmp char, 'y'

je yellow

cmp char,'G'

je green

cmp char, 'g'

je green

jmp error

;the code if the light is red

red:

mov ah, 09h

mov dx, offset stop

int 21h

jmp exit

;if the light is yellow

yellow:

mov ah, 09h

mov dx, offset police

int 21h

;read in the character to see if there is police

mov ah, 01h

int 21h

mov letter, al

;checks if there is police cars near you

cmp letter, 'Y'

je policecar

cmp letter, 'y'

je policecar

cmp letter, 'N'

je speed

cmp letter, 'n'

je speed

;speedup if no police

speed:

mov ah, 09h

mov dx, offset speedup

int 21h

jmp exit

;stop if there is a police car

policecar:

mov ah, 09h

mov dx, offset stop

int 21h

jmp exit

green:

mov ah, 09h

mov dx, offset drive

int 21h

jmp exit

error:

mov ah, 09h

mov dx, offset invalid

int 21h

jmp prompt

exit:

mov ax,4c00h

int 21h

endp

end main







