



Princess Sumaya University for Technology
Computer Engineering Department
CPE22440: Microprocessors Lab

Experiment 3: Interrupts

Write an assembly program to move a square around the screen, and always moves in a selected direction specified by a keyboard input every round.

When user presses

R: square should move to the right (counter clockwise).

L: square should move to the left (clockwise).

Note: your program should start with the square at the top left corner of the screen.

Hint:

Use Int 10h

INT 10h / AH = 0 - set video mode.

input:

AL = desired video mode.

these video modes are supported:

00h - text mode. 40x25. 16 colors. 8 pages.

03h - text mode. 80x25. 16 colors. 8 pages.

13h - graphical mode. 40x25. 256 colors. 320x200 pixels. 1 page.

INT 10h / AH = 06h - Scrolls part or all of the current display page up by one or more text lines. This function can also be used to clear part or all of the screen..

input:

AL = number of lines by which to scroll (00h = clear entire window).

BH = [attribute](#) used to write blank lines at bottom of window.

CH, CL = row, column of window's upper left corner.

DH, DL = row, column of window's lower right corner.