

### Transformation and Basic Animation

In this lab exercise, we will continue with geometry transformation. In order to perform isolation animation, we need commands that perform stack operations to control current matrix.

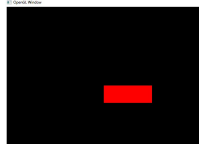
#### 1. `glPushMatrix()` ... `glPopMatrix()`

Push matrix will save your current transformation matrix mode, while pop matrix will load the last saved transformation matrix mode. It allows the transformation occurred in the block will not affects other objects outside of the block.

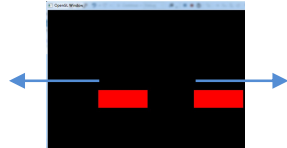
### Practical Exercise 3

#### 1. Create two interactive rectangle in OpenGL with following condition:

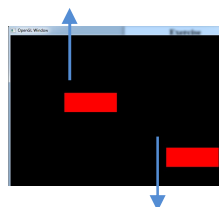
- a. Two rectangles locate at origin at beginning.



- b. Press right or left will move first rectangle to left and move second triangle to right. No matter right or left button press, only direction will move. (1 mark)



- c. Press up or down will move up first rectangle and move down second triangle. No matter up or down button press, only direction will move. (1 mark)



- d. Press space button will reset all to origin. (1 mark)

