**Object Oriented Programming in Java (Lab 6)**

**Problem:**

1. Write a program that draws a fixed circle, rectangle and triangle. Whenever a mouse is moved, display the message indicating whether the mouse point is inside the figure, as shown in figures below.

2. Write a program that displays a circle. You can point the mouse inside the circle and drag

(i.e.,move with mouse pressed) the circle wherever the mouse goes, as shown in Figure below.

3. Write a program that displays head ( H ) or tail ( T ) for each of nine coins, as shown in Figure below. When a cell is clicked, the coin is flipped. A cell is a JLable . Write a custom cell class that extends JLable with the mouse listener for handling the clicks. When the program starts, all cells initially display H .

**Structure:**

Package SNU.GUIUtil contains all the 3 classes.

**Input:**

1. Users is to input 1,2 or 3 for the desired figure and then mouse pointer inside or outside the figure.

2. Circle needs to be dragged.

3. User needs to click any panel which he wants to change.

**Output:**

1. Program displays if the mouse pointer is inside or outside the figure.

2. The circle will be dragged along with the mouse pointer.

3. The label on the panel clicked by the user gets changed everytime a click is done.