**WORKSHEET – In class on week 5 day 2**

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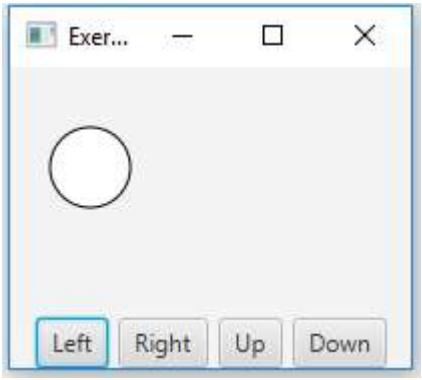
| 1 | **Move the Ball**<br><br>• Write a program that moves the ball in a pane. You should define a pane class for displaying the ball and provide the methods for moving the ball left, right, up, and down, as shown below.<br>• Check the boundary to prevent the ball from moving out of sight completely.<br>• ***Hint***: Imitate **ControlCircleWithMouseAndKey**. However, your program needs to respond to the clicks of the four buttons only. **ControlCircleWithMouseAndKey** also responds to mouse clicks and key strokes.<br><br>  |
| 2 | **Calculate investment value**<br><br>• Write a program that calculates the future value of an investment at a given interest rate for a specified number of years. The formula for the calculation is:<br>futureValue = investmentAmount * (1 + monthlyInterestRate)$^{years*12}$<br>• ***Hint***: Imitate **LoanCalculator**. |

**THE END**