## Lab Exercise-6

## **Mobile and Application Development Lab**

- 1. Create an application having a grid-layout with three rows and three columns, such that on clicking any cell, either a '0' or an 'X' falls from the top, alternatively. You can download appropriate images from the web, or use images given by your instructor. {Hint: Use your animation skills that you have learnt to solve lab exercise 4}
- 2. Make suitable adjustments in your partially developed app so that on clicking any cell, a toast displays which cell was clicked and whether a '0' or an 'X' populated it. {Hint: You may need to be aware about tag attribute to solve this problem. Unaware? Ask your instructor}
- 3. Find a way to improve your app such that it declares the '0' or the 'X' as a winner if the three consecutive cells in a row or a column in the grid contains all '0s' or '1s', respectively. Even if three '1s' or '0s' are found in consecution in any of the two possible diagonals, the winner can be declared. Use toast to declare the winner. {Hint: You can solve this problem using arrays-one dimensional and two dimensional}
- 4. At the last, further improve your app in such a way that the application stops allowing a user to play once a winner is detected. The game can only be restarted from here. {Hint: Use your brain}
- 5. Did you notice any bugs in your developed app? Explain the bugs, and also show how will you remove them