**Introduction**

The purpose of this lab is to give you practice setting UI constraints to:

* Position controls relative to other controls
* Center controls on the screen
* Make a control’s size relative to the screen size

**Four-Function Calculator**

Create a calculator that has:

* buttons for ten digits and an enter button
* buttons for the four math functions and equals
* A display that shows the numbers as they are entered and that shows the result of a math operation.

The “keyboard” and “display” should all be centered in the screen. They controls should stay centered when you run the app with different size screens and the controls should expand on larger screens and shrink on smaller screens so that their sizes are proportional to the screen size.

Take two screen shots of the app running that show it on a large and small screen.

Alternative lab assignment  
Build any app that has a grid of buttons and/or labels. There should be at least 12 controls on the screen. The controls should be centered on the screen and their sizes should be proportional to the screen size. An example would be a Mine Sweeper game.

**Submission:**

Zip each solution folder and upload it.  
Put the screen shots in a document, label each screen shot, and upload the document.