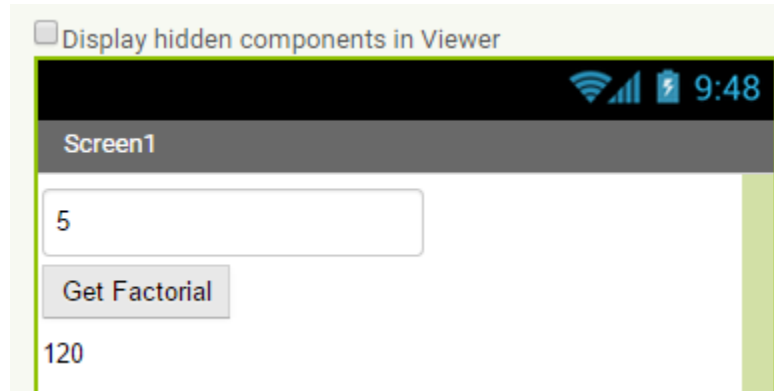# Challenge Accepted Lesson 4 – Challenge Walkthroughs

Below are the apps that you can make in a short time. You will be given a few minutes to work with them, then we'll walk through them as a class.

Challenge 1: Create an app with a textbox, a button and a label that calculates n! (factorial) using a loop, where n is a variable. For instance, 5! = 1 * 2 * 3 * 4 * 5.
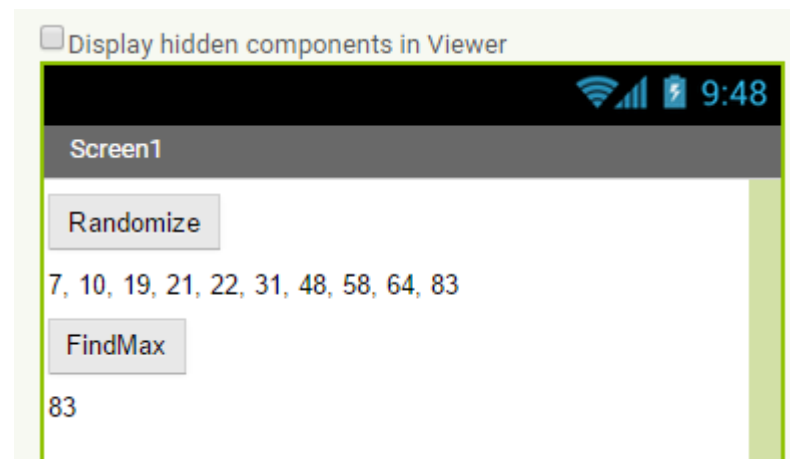

Challenge 2 Create an app with 2 labels and 2 buttons where one button:

- uses a for loop that fills up a list with 10 random numbers from 1 to 100
- Sets the text of label1 to the list of random numbers

The second button will:

- use a for loop to find the maximum number
- Set label2 to the largest number

Challenge 3 Create an app with 3 balls bouncing around a canvas. Each 10 milliseconds, draw a line from each ball to each other ball.

- You will need to make a list of balls using the Component type block at the end of the ball menu
- You will need to use blocks from the "Any Ball" menu

This challenge involves a lot of new blocks. It is *extra* challenging!