

## **CS150 - Computer Organization and Architecture**

### **Homework #6 - Spring 2024**

Build a subroutine in CS150 AVR assembly language named `NumOnesInR16`. Your `NumOnesInR16` subroutine will count the number of bits that are one (or *set*) in R16 and place the resulting count into R1. You may only use instructions that are contained within the CS150 AVR instruction subset. Be sure to test your subroutine by building some code that calls it with different values in R16.