

# EECS 2032

## LAB 5 Fall 2019

In this lab, you will write programs using loops and strings

### Problem 1

Write a program to the maximum run of 1's in a string of 1 and 0's  
For example, consider the string

```

      ↓      ↓      ↓      ↓ ↓
101100010111101011101010
      ↔      ↔      ↔
      2      4      3

```

There are 8 groups of 1's. 5 of them contains a single 1, and the other three contains runs of 2,4,3. The maximum run is 4

### Specifications

Your program reads from the standard input one string terminated by a white space.

If the string contains any character other than 1 or 0, your program prints "invalid string" without the quotes followed by a new line then quits.

Otherwise, your program prints one integer, that the maximum run of 1's followed by a new line and quits.

**Submit the file as** submit 2032 LAB5 lab5\_1.c

### Problem 2

Write a program to read an integer and display an integer that is formed by reversing the digits in the integer you read.

For example 34516 becomes 61543

### Specifications

Read one integer, display one integer followed by a new line  
You should be able to read up to the maximum size of unsigned long long

**Submit as** submit 2032 LAB5 lab5\_2.c

