

EECS 2032

LAB 9 Winter 2020

The code will be checked for plagiarism.

Problem 1

When your program starts, both LED's are ON.

When we push SW3, the Interrupt service routine turns the red LED OFF and sets a flag (global variable).

The main program (after checking the flag) will turn off the green LED 3 seconds later.

Submit to LAB9 lab9.c (the C code) and Report9.doc (or pdf)

Problem 2

Write a program to show the maximum overlap between two strings. The maximum overlap is the maximum suffix of the first string that is the same as a prefix of the second string

Consider the two strings S1="ABRKLSL" and S2="LSLPR", what is the maximum overlap between them

```
ABRKLSL
  LSLPR   Overlap of 0 (trivial case) no overlap (shift 1)
ABRKLSL
  LSLPR   Overlap of 1 (shift 1)
ABRKLSL
  LSLPR   No overlap (shift 1)
ABRKLSL
  LSLPR   Overlap of 3 (shift 1)
ABRKLSL
  LSLPR   No overlap (shift 1)
ABRKLSL
  LSLPR   No overlap (shift 1)
```

Then the maximum overlap is 3

Then, you have to repeat the same thing by exchanging these two strings (S1 and S2) and get the maximum of the 2 maximums

```
LSLPR
  ABRKLSL   over lap of 0 (shift by 1)
LSLPR
  ABRKLSL   No overlap
LSLPR
  ABRKLSL   No overlap
LSLPR
  ABRKLSL   No overlap
LSLPR
  ABRKLSL   No overlap
LSLPR
  ABRKLSL   No overlap
LSLPR
  ABRKLSL   No overlap
```

The maximum overlap is 3

Specifications

- S1 and S2 on two lines (stdio)
- The output is an integer followed by a new line

