

CS 315-01 Project 03

Project 02 Exam Probs due tonight 11:59

Tue strings lb/sb

2's complement

Wed bits

micro config for risc-v

gdb config

gdb on string func debugging

x/ examine memory

bitwise ops in assembly

get_bitseq-s.s

shifts

$x \gg n$

logical
arithmetic

eval.c

→

foo(int *xp)

reverse string rstr

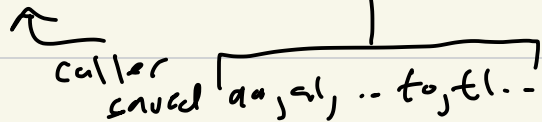
calling strlen

- global rstr_s
- global strlen

rstr_s:

#a0 ← ptr to str

call strlen



restore

bitwise opr in assembly

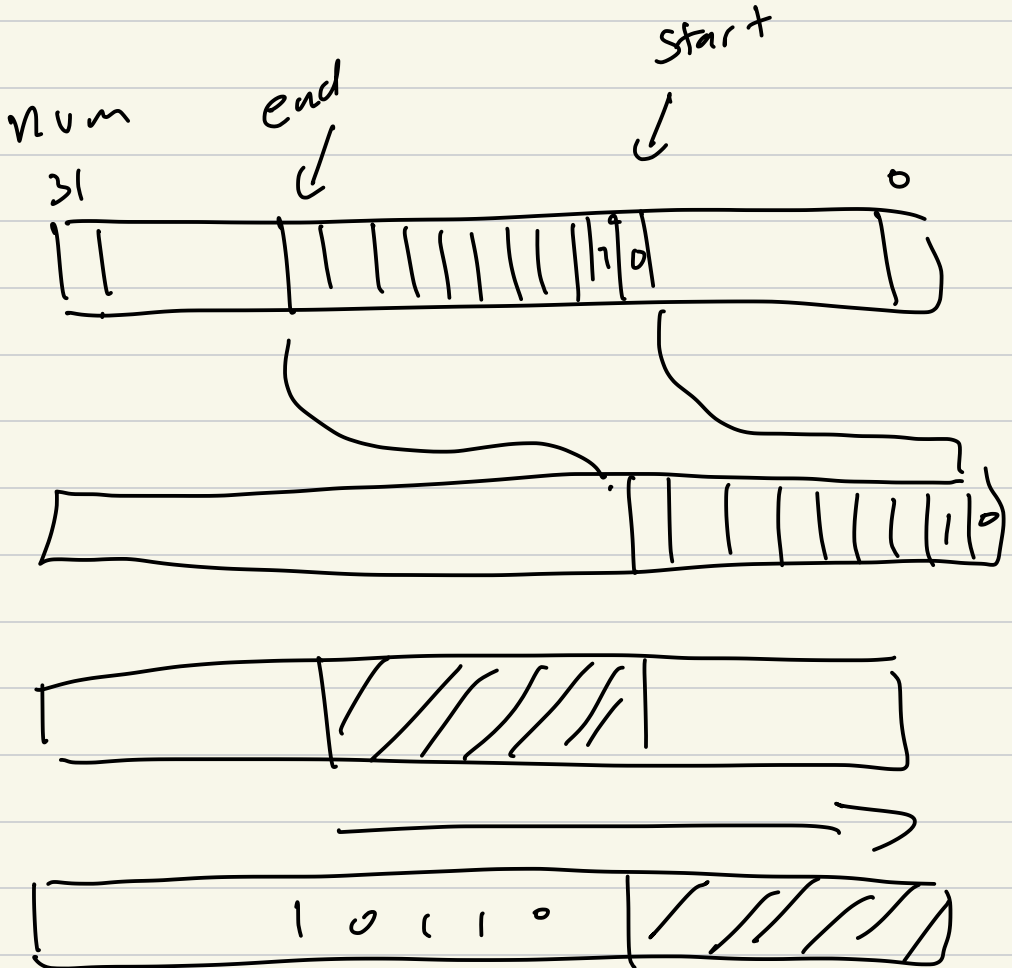
$$\begin{array}{r} 0000\ 0001 \leftarrow \\ \text{in} \ 1111\ 1110 \\ + \\ \hline 1111\ 1111 \end{array}$$

inv 06 0110

06 1111

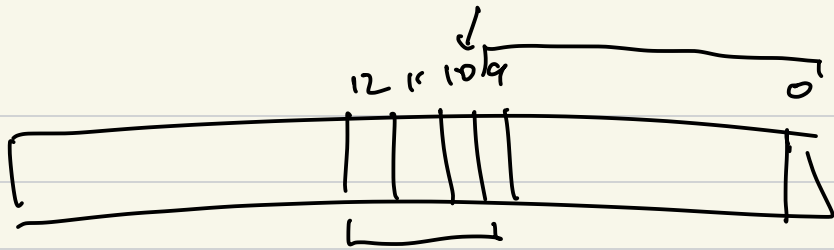
06 0110

XOR 1001



mask
0

0 0 0 0 1 1 1 1 1 1 1 1



start 10
end 12

$$12 - 10 = 2$$

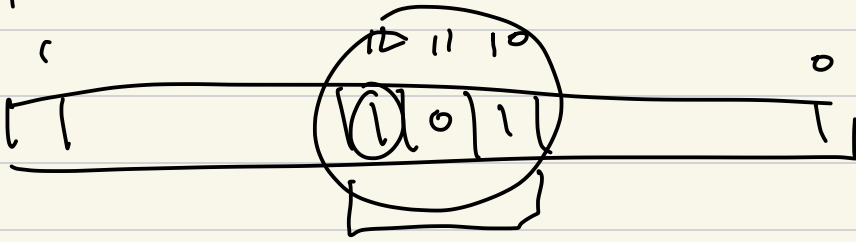
$$2 + 1 = 3$$



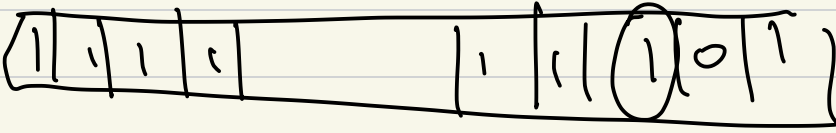
obj << len

$$\begin{array}{r}
 31 \\
 0 \quad \dots \quad \overbrace{0001} \\
 0 \quad \dots \quad \underbrace{001000} \quad 8 \\
 \quad \quad \quad \quad - 1 \\
 \quad \quad \quad \quad 0111 \quad \frac{7}{7}
 \end{array}$$

Num



63



sr |
sra

