

# CS 250P Computer Systems Architecture Fall 2019

## **More MIPS Instructions - Memory organization, offsets, shift, control instructions**

[Slides Adapted from Rajeev Balasubramonian's Slides on MIPS for CS 3810 at University of Utah]

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Aftab Hussain  
University of California, Irvine

# Memory Organization

Let's see what's the program's  
view of the virtual memory

Now, let's write an assembly  
programing involving base  
address and offsets.

# Instruction Formats

[Rajeev's Slides - CS 3810](#)

(Slide 20)

# Logical Operations

[Rajeev's Slides - CS 3810](#)

(Slide 21)

# Control Instructions

[Rajeev's Slides - CS 3810](#)

(Slide 22 - 23)

Write MIPS Assembly code for this C code:

```
while (save [i] == k)
    i += 1;
```

# References

[Rajeev Balasubramonian, CS/ECE 3810  
Computer Organization: Video 10](#)

[Rajeev BalasubramonianCS/ECE 3810 Computer  
Organization: Video 11](#)

[MIPS Instruction Reference](#)

Thank you