

# COMP1521 Week 3

Welcome!!!

Join the Kahoot while we wait

# Overview

- Assignment 1 released
- Debugging in MIPS
- Memory
- Arrays in MIPS
- Worked examples

# Debugging mips tips

- Take it line by line
- Write down what is changing in each register
- Remember to write comments for easier debugging
- For large programs such as you assignment
  - Use breakpoints and mipsy to find the approximate position of your bug
  - Use printf to find the approximate position of your bug
- Take a break 🙌

# Tutorial Q2

What	Bytes	Bits	Usually used to store
Byte	1	8	char, 8-bit integers
word	4	32	32-bit integers

# Arrays

# char array = “array”

Address	0x10010000	0x10010001	0x10010002	0x10010003	0x10010004
Index	0	1	2	3	4
Value	a	r	r	a	y

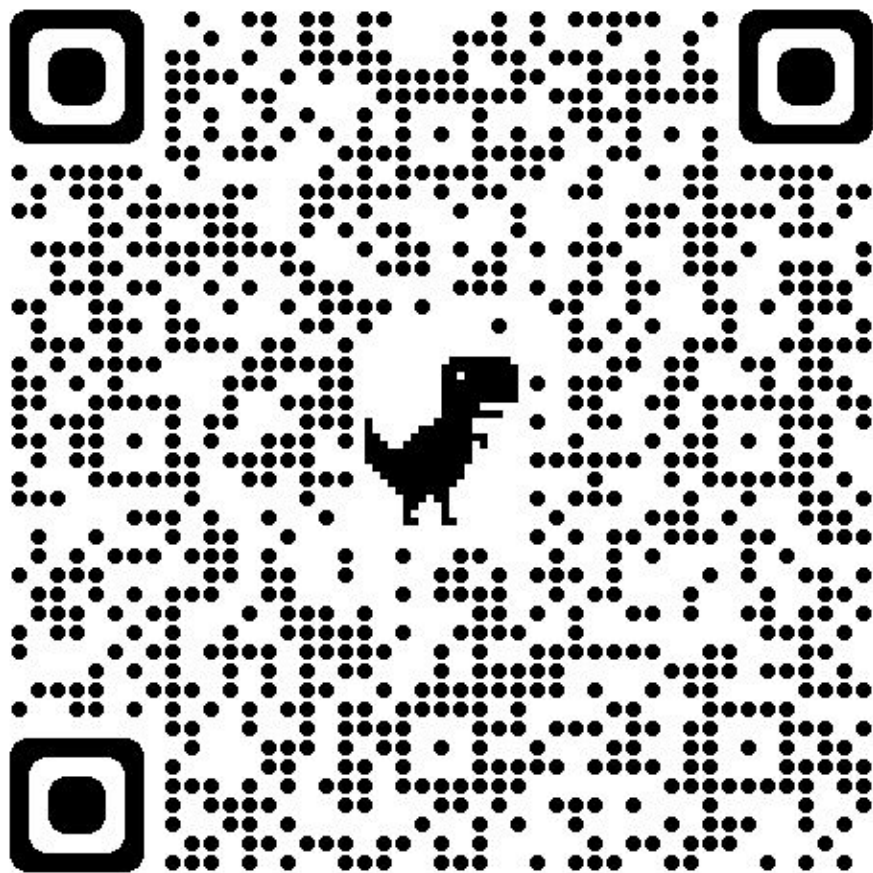
```
int array = [5, 1, 20, 3, 2]
```

Address	0x10010000	0x10010004	0x10010008	0x1001000C	0x10010010
Index	0	1	2	3	4
Value	5	1	20	3	2

# MIPS style thing

- Informative labels
- Tabs vs spaces
- Commenting
- Indentation
- White space





Code: apple