

## 3.1 MIPS32 Assembly Language

### Add and Subtraction

- `add $d $s $t` is equivalent to  $\$d = \$s + \$t$
- `sub $d $s $t` is equivalent to  $\$d = \$s - \$t$

### Constants

To load an intermediate value using the CS241 subset, we must use `lis` followed by `.word` because CS241 likes to be stubborn.

**Example 3.1** *Load 2 into register \$1*

```
1  lis $1
2  .word 2
```

### Jumping

In order to jump to a particular line, you must use the `jr $d` command, with `$d` representing the line number you wish to jump to. Jumping can be used to mimic function calls and returns. Additionally, `jr $31` can be used to exit the application.