ALU Instruction(s)

- ADD.L src1,src2/dst
  - Size is always .L (cannot choose .B or .W)
  - Adds src1 and src2/dst and places result in src2/dst overwriting the original value
  - One operand MUST BE a data register though it can be either source or dest. (e.g. ADD.L Dn,dst or ADD.L src,Dn
- SRC can be {reg, mem., immediate}
- DST can be {reg, mem.}

Examples

- Initial Conditions:

```
000000   5 6 7 8 1 2 3 4
D0:      1 2 3 4 5 4 3 2
D1:      C 8 2 D F E 9 8
```

- ADD.L D0,D1

```
   1 2 3 4 5 4 3 2
 + A B C D F E 9 8
D1:  D A 6 2 5 2 C A
```

- ADD.L D0, 0

```
   1 2 3 4 5 4 3 2
 + 5 6 7 8 1 2 3 4
000000  6 8 A C 6 6 6 6
```

- ADDI.L #0x341E, D0

```
   0 0 0 0 3 4 1 E
 + 1 2 3 4 5 4 3 2
D0:  1 2 3 4 8 8 5 0
```