

### Example 1

MOVI  $R_1 \leftarrow 0 + 11011000$   
 MOVI  $R_2 \leftarrow 0 + 11111000$   
 ADD  $R_3 \leftarrow R_1 + R_2$   
 SUB  $R_4 \leftarrow R_2 - R_1$   
 AND  $R_5 \leftarrow R_1 \& R_2$   
 EXOR  $R_6 \leftarrow R_1 \oplus R_2$   
 OUT  $\text{Port}[00000001] \leftarrow R_3 + 0$

### Example 2

MOVI  $R_1 \leftarrow 0 + 00000010$   
 MOVI  $R_2 \leftarrow 0 + 00000001$   
 ADD  $R_3 \leftarrow R_1 + R_2$   
 ADDI  $R_4 \leftarrow R_1 + 00000010$   
 PUSH  $\text{Stack} \leftarrow R_3 + 0$   
 POP  $R_5 \leftarrow \text{Stack}$   
 JMP Jump to code address 00000001

### Example 3

MOVI  $R_1 \leftarrow 0 + 00000001$   
 MOVI  $R_2 \leftarrow 0 + 00000010$   
 STORE  $M[00000011] \leftarrow R_2 + 0$   
 LOAD  $R_3 \leftarrow M[00000011]$