

Arithmetic Instructions: Immediates

001001001010010100000000000000101

op rs rd immediate

6 bits 5 bits 5 bits 16 bits

I-Type

op	mnemonic	description
0x9	ADDIU rd, rs, imm	$R[rd] = R[rs] + \text{sign_extend}(\text{imm})$
0xc	ANDI rd, rs, imm	$R[rd] = R[rs] \& \text{zero_extend}(\text{imm})$
0xd	ORI rd, rs, imm	$R[rd] = R[rs] \mid \text{zero_extend}(\text{imm})$

ex: $r5 = r5 + 5$ # ADDIU r5, r5, 5
 $r5 += 5$

What if immediate is negative?

ex: $r5 += -1$ ex: $r5 += 65535$