

Control Flow: More Branches

Conditional Jumps (cont.)

000001001010000100000000000000010

op rs subop offset
6 bits 5 bits 5 bits 16 bits

almost I-Type

signed
offsets

op	subop	mnemonic	description
0x1	0x0	BLTZ rs, offset	if $R[rs] < 0$ then $PC = PC + 4 + (\text{offset} \ll 2)$
0x1	0x1	BGEZ rs, offset	if $R[rs] \geq 0$ then $PC = PC + 4 + (\text{offset} \ll 2)$
0x6	0x0	BLEZ rs, offset	if $R[rs] \leq 0$ then $PC = PC + 4 + (\text{offset} \ll 2)$
0x7	0x0	BGTZ rs, offset	if $R[rs] > 0$ then $PC = PC + 4 + (\text{offset} \ll 2)$

ex: BGEZ r5, 2

If($R[r5] \geq 0$) then $PC = PC + 4 + 8$