



**Memory Instructions**

- **Load** into `$rd` the value that is stored at the address that is obtained by adding the immediate offset to the content of `$rs1`.
- **Store** the content of `$rs2` at the address that is obtained by adding the immediate offset to the content of `$rs1`.
- The addressing mode used for those instructions is called register-relative addressing.

ld

\$rd

offset(\$rs1)

sd

\$rs2

offset(\$rs1)

# Control-Flow Instructions

- Control flow, at machine code level, is the order in which instructions are executed.
- All previous instructions feature implicit **trivial control flow**, that is, they simply set the program counter to the next instruction. Their main purpose is **data manipulation**.
- The following instructions have a more sophisticated effect on control flow.

# Memory Instructions

ld	\$rd	offset(\$rs1)
sd	\$rs2	offset(\$rs1)

- **Load** into \$rd the value that is stored at the address that is obtained by adding the immediate offset to the content of \$rs1.
- **Store** the content of \$rs2 at the address that is obtained by adding the immediate offset to the content of \$rs1.
- The addressing mode used for those instructions is called register-relative addressing.