COMP110: Principles of Computing

4: Session title here

Learning outcomes

- **Distinguish** the basic types of logic gate
- **Use** logic gates to build simple circuits
- **Explain** how computer memory works

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Binary notation

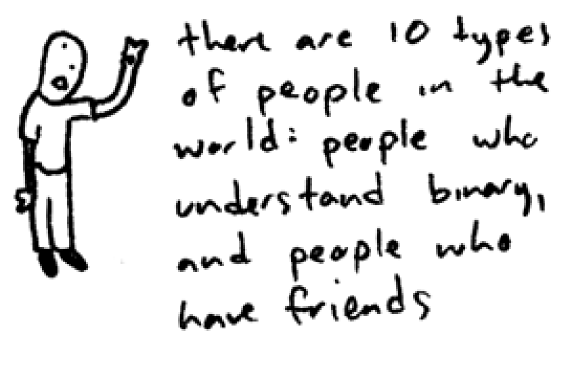

Image credit: http://www.toothpastefordinner.com

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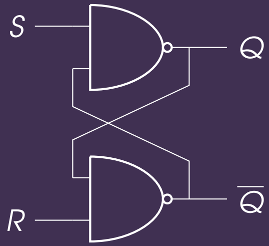
Computer memory

What does this circuit do?



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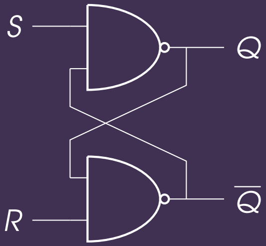

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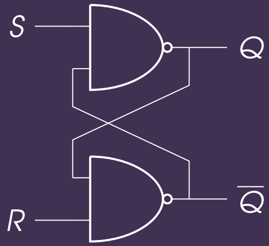

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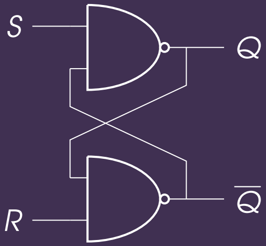

- This is called a **NAND latch**
- It "remembers" a single boolean value
- Put a few billion of these together (along with some control circuitry) and you've got **memory**!