Bitwise Operators

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1 Bitwise Operators

- Bitwise operators act on numbers at the bit level

- There are Four bitwise logical operators

  - Exclusive OR (XOR)
    * Usage:
      · XOR register1, register2
      · XOR register, constant
    * If bit i of register2 $= 1$, then flip bit i of register1

  - NOT
    * Usage:
      · NOT register
    * Flips every bit of register

  - OR
    * Usage:
      · OR register1, register2
      · OR register, constant
    * For every bit i of register2 $= 1$, then bit i of register1 $= 1$

  - AND
    * Usage:
      · AND register1, register2
      · AND register, constant
    * For every bit i of register2 $= 0$, set bit i of register1 $= 0$