## C Operators

- #define or const to define a constant
- Basic athirmetic operators
- Exanded arirthmetic: %, ++, -
- preincriment and postincriment are included
  - a++ uses current value of a, then incriments the value of a
  - ++a uses the new value of a, proceeding the incriment.
- Relational operators are the same as Java.
- Bitwise Operators
  - &
  - Binary AND operator copies a 1-bit to the result if it exists in both operands
  - \_ \_
  - Binary OR operator copies a 1-bit to the result if it exists in either operands
  - Up Carrot
  - Binary XOR operator, copies a 1-bit to the result if it exists in only one operand
  - Tilde
  - Binary NOT operator, copies a 1-bit to the result if it does not exist in the operand.
  - <<
  - Binary Left Shift operator, the left operands value is moved left by the number of bits specificed in the right operand: A << 2
  - Left Shift same as  $*2^k$  where k is the number of bits shifted
  - >>
  - Binary Right Shift, the left operands value is moved left by the number of bits specificed in the right operand: A<<2
  - Right Shift same as  $\frac{1}{2k}$  where k is the number of bits shifted
  - Assignment: <<=, >>=, & =, carrot =, tilde =