

# Problem Solving tools so far..

## Variables

- allocate space to remember something
- examples:
  - int x; // x can hold an integer,
  - char c; // c can hold a character.(int + char are datatypes)

## Assignment

- copy contents of one variable to another:

- examples:

x = y; // now x also contains y's value

can also assign using literal expressions:

int x = 7; // 7 is literally 7.

char c = 'A'; // use single quotes for a single character.

⊗ Note: usually LHS ≠ RHS should have  
the same datatype (some exceptions)

~~'A' = c;~~ // can't assign to literals!!

## Flow of Control (if/while)

example: if ( $x < 7$ ) {  
    cout << "less than Seven";  
}

Q: what is the datatype of  $(x < 7)$ ?

A: bool (for Boolean)

Today: a closer look at datatypes.