

C/C++ Programming Style Sheet

Condition statement

`if (x == 0);` → `if (!x);`
`if (x != 0);` → `if (x);`

Variable value control

Set variable to zero

`x = 0;` → `x ^= x;`

Variable /= 2

`x /= 2;` → `x >>= 1;`

Variable *= 2;

`x *= 2;` → `x <<= 1;`

Naming

- **loop counter**
 - `ecx` General 32 bit **loop counter**
 - `ecx` 32 bit loop counter used in a **for loop**
 - `wecx` 32 bit loop counter used in a **do/while loop**If it's nested, the second loop counter name will be `edx...ecx...efx`
- if the variable is a **pointer** type, `pX` will be named. PointerToPointer type will be `ppX`
- If it's a **class object**, it will be `cClassObject`
If it's a **pointer to class object**, it will be `pcClassObject`
- If `calloc` / `malloc` used, I will usually create 2 variables, `pX_ESP`, `pX_EBP`
`pX_EBP` is the **base address**, `pX_ESP` is the next empty memory address, `pX_ESP++` after used.
- If the parameter named `_in_variableName` in **header file**, it's a **pointer reference**, it's not an actual value, caller may use that reference value for further calculation.