Source Code Style

1. proper indentation

\[
\text{if } ( ) \ \downarrow \\
\text{vs.}
\]

\[
\text{if } ( ) \\
\]

use spaces instead of tabs
line things up

```c
int uj //
int g_is_a_var j //
float f; //
```

```c
int uj
int g_is_a_var j //
float f; //
```
2. Lots of white space

\[ \text{Calc}(a+b-c/d(c+f)+17-g) \]

\[ \text{Calc}(a+b-c/d(e-f)+17) \]

Use blank lines

(for vertical spacing)
3. Variable names

Camel casing vs underscore
Consistency is what matters

- do not abbreviate
  → spell things out

- do use naming conventions
e.g: in Forth:

```
: balance .
:
```

all printing words
4. Use comments appropriately

See later
Commenting

What info should comments contain?

int a; // declare a as an integer
Comments should explain why

coords.push(i, (height - 3 - r/(101.0/(height - 4)))]

// y coord
// is scaled based on
// the min, max value of
// the data
function sort_data(int [] a) {
    // See Knuth Vol 4, pg 10 quicksort
    p = rand(0, a.length);
    m = a.length/2;
    a[m] = a[p];
}

Self-documenting code

1. Use good variable names
   bank_balance vs bl

2. Don’t use short variables except when convention dictates otherwise


Never use Numbers!!!

```c
#define HEIGHT 512

// Incorrect
setscreen(HEIGHT, 200);
```
Setscreen(400,120)

Which is the height?

create win(400,120,8,8,0,Null,16);

which is the pixel depth?
createWin(HIGH, WIDTH, BPP, BORDER_STYLE, ...);

} /*
 Suppose you're writing code & you need to include createWin.......
\texttt{CreateWin(\texttt{height} = \texttt{HEIGHT}, \\
width = 14, \texttt{bpp} = \texttt{BPP-MAX}, \\
...)}$

\texttt{languages = easy}$

\texttt{Tools = ...}