

Week Two

C++ starring Mr Feeney

1. You can join "cin"s in one line: i.e. `std::cin >> n1 >> n2 >> n3;`
2. Single quotes mean "characters" aka "char" in C++
3. Humans are puny
4. Due to historical reasons, array indices start with 0
 1. `myarray[1];` // where 1 is called that "index"
 2. arrays are just short form of typing all the variables
5. `//` makes a comment, computers ignore the line after it i.e. `//haha`
6. `int num[5];` // array that is 5 in length
7. `int num[5] = {0};` //initialize every element with 0
8. `int num[5] = rand();` //initialize every element random integers
9. Static arrays has to know its length at compiling time
10. You can put stuff onto two places in memory: stack and heap
11. Max size of static arrays is the max stack's space
12. Static arrays are put into a stack, function calls are put into stacks
13. All "new"s are put into a heap.
14. `"const int mi_length"` and `"#define MYLITTLEPONY mi_length"` makes a constant (computer can't change it after)
15. "for" loop
 1. `for(STARTING CONDITION; GO UNTIL THIS IS FALSE; DO THIS EACH TIME AFTER){//code}`
 2. C++ is called C++ because "++" means add one in C++
16. `Rand()` gives "pseudorandom" - under the same system and condition, it gives the same number every time
17. `sum += blah;` // it takes blah and add into sum, same as `"sum = sum + blah;"`
18. Question: What advantage does a static array have over dynamic ones?