

CS 103000

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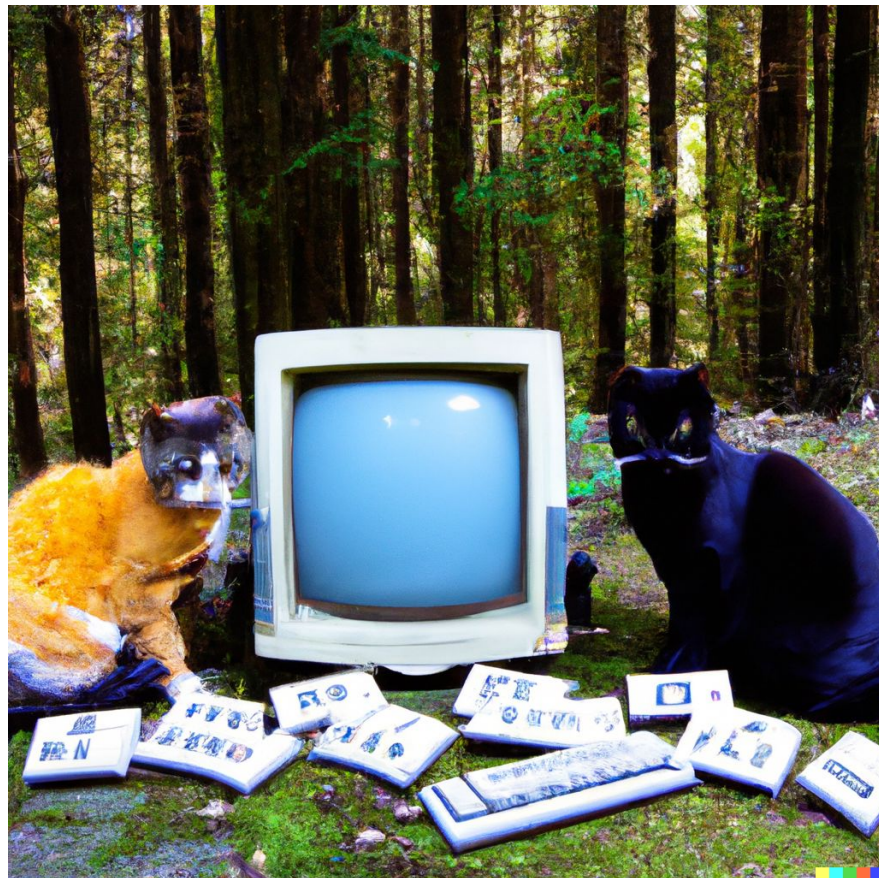
Week 5:

LOOPS (part 2)

□ FOR & NESTED LOOPS

Attendance:

<https://proton-cs103.glitch.me/>



Dall-E 2: cats learning C++ in the forest on '90's technology



while (raining)

PROJECT EULER

<https://projecteuler.net/>

800+ problems ...



Multiples of 3 or 5

Problem 1



If we list all the natural numbers below 10 that are multiples of 3 or 5, we get 3, 5, 6 and 9. The sum of these multiples is 23.

Find the sum of all the multiples of 3 or 5 below 1000.

Problem 1: answer 233168

for loops!

```
int i;  
for (i = 0; i < max; i++) {  
    // loop in here  
}
```

for loops!

```
6    int i = 0;
7    while (i < 5) {
8        // code
9        i++;
10   }
```

while: when you want to loop "until" something

```
6    int i;
7    for (i = 0; i < 5; i++) {
8        // code
9    }
```

for: when you want to loop a certain number of times, or count the number of times





Nested for loops:
MULTI-DIMENSIONAL

