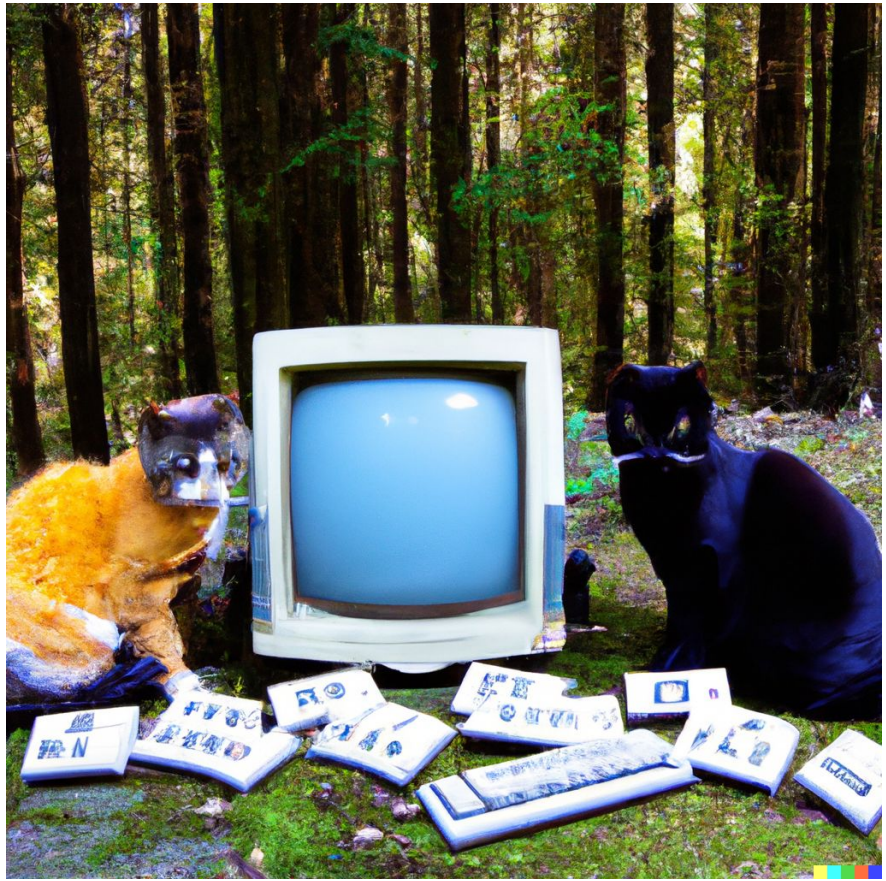
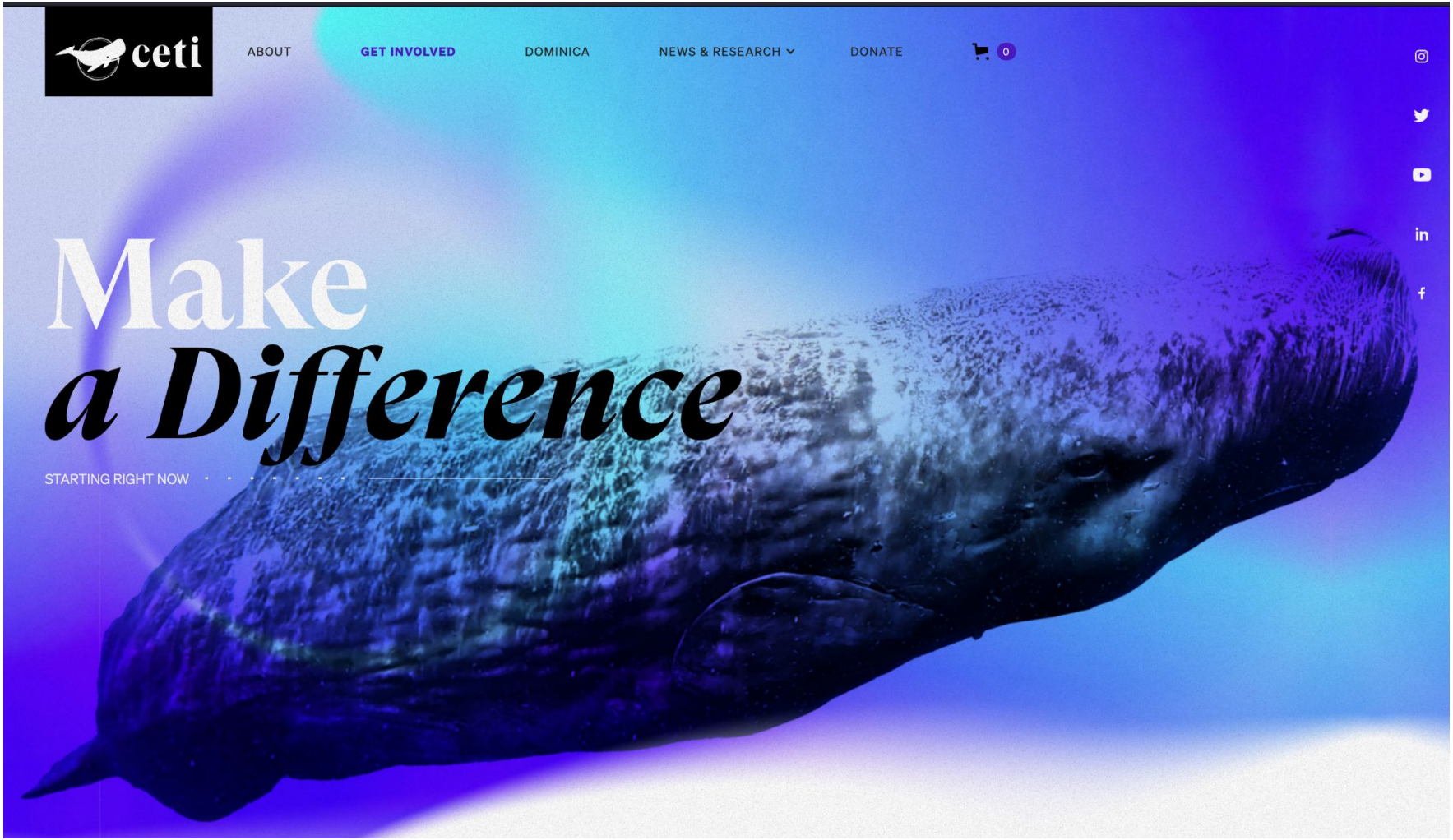
CS 103000
Prof. Madeline Blount

Week 5:
LOOPS (part 2)
□ NESTED LOOPS

Attendance:
none today 👍



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


ceti
ABOUT
GET INVOLVED
DOMINICA
NEWS & RESEARCH
DONATE
0
Make
a Difference
STARTING RIGHT NOW

ANNALS OF NATURE

CAN WE TALK TO WHALES?

Researchers believe that artificial intelligence may allow us to speak to other species.

By Elizabeth Kolbert

Scientists involved:

- CUNY (Gruber, biologist)
- MIT
- Oxford
- Harvard

Github link, C++

"I think it's something that people get really excited about: Can we go from science fiction to science?" Rus told me. "I mean, can we talk to whales?"

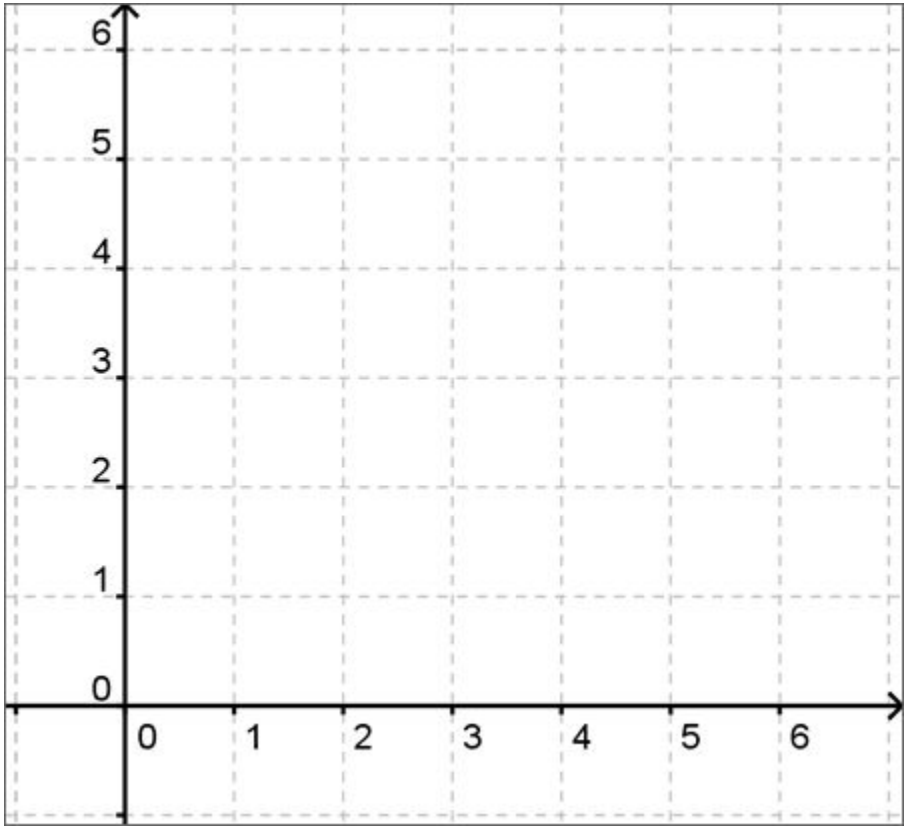
New Yorker, Sept. 4, 2023 (link)

for loops!

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

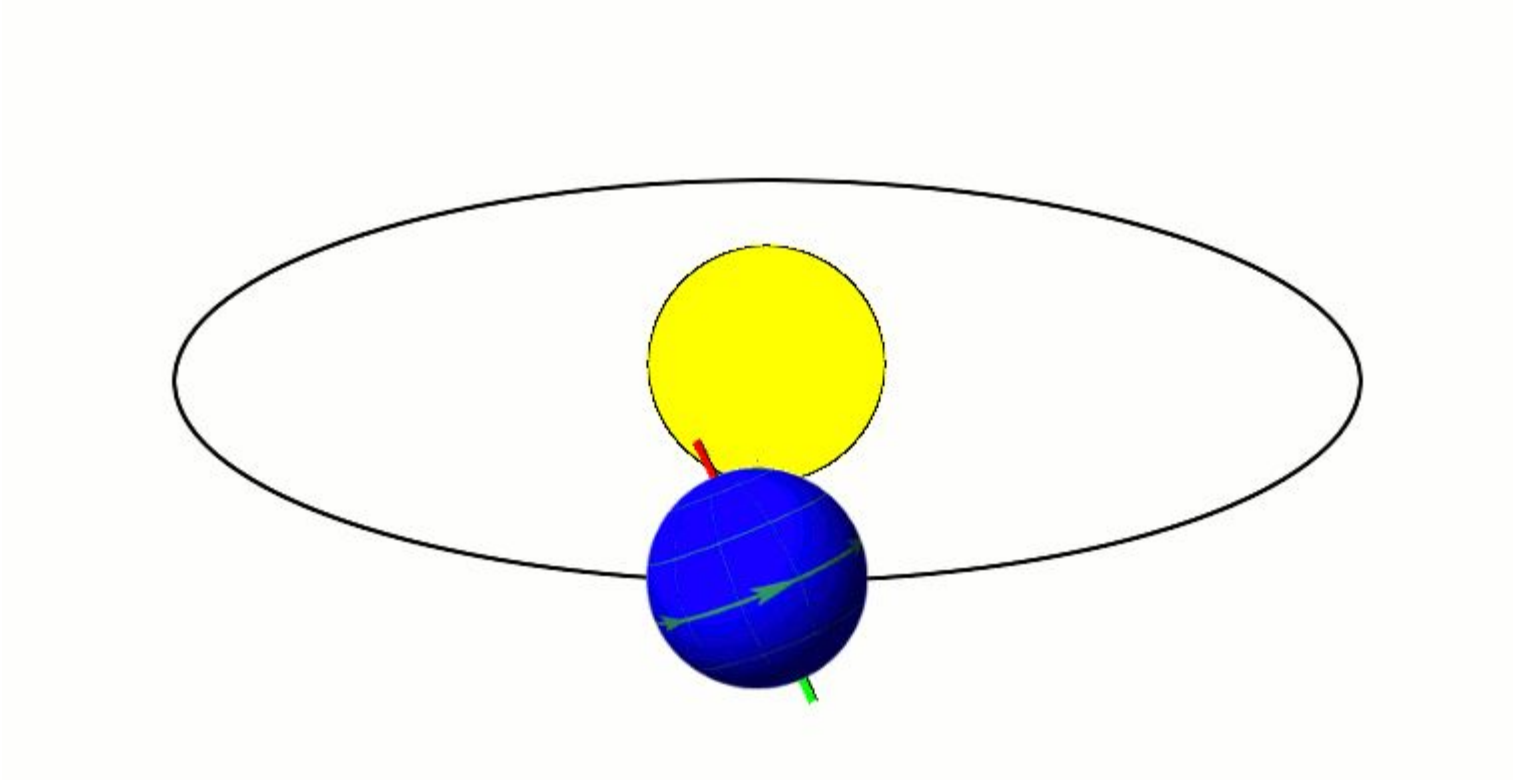
Busch Gardens

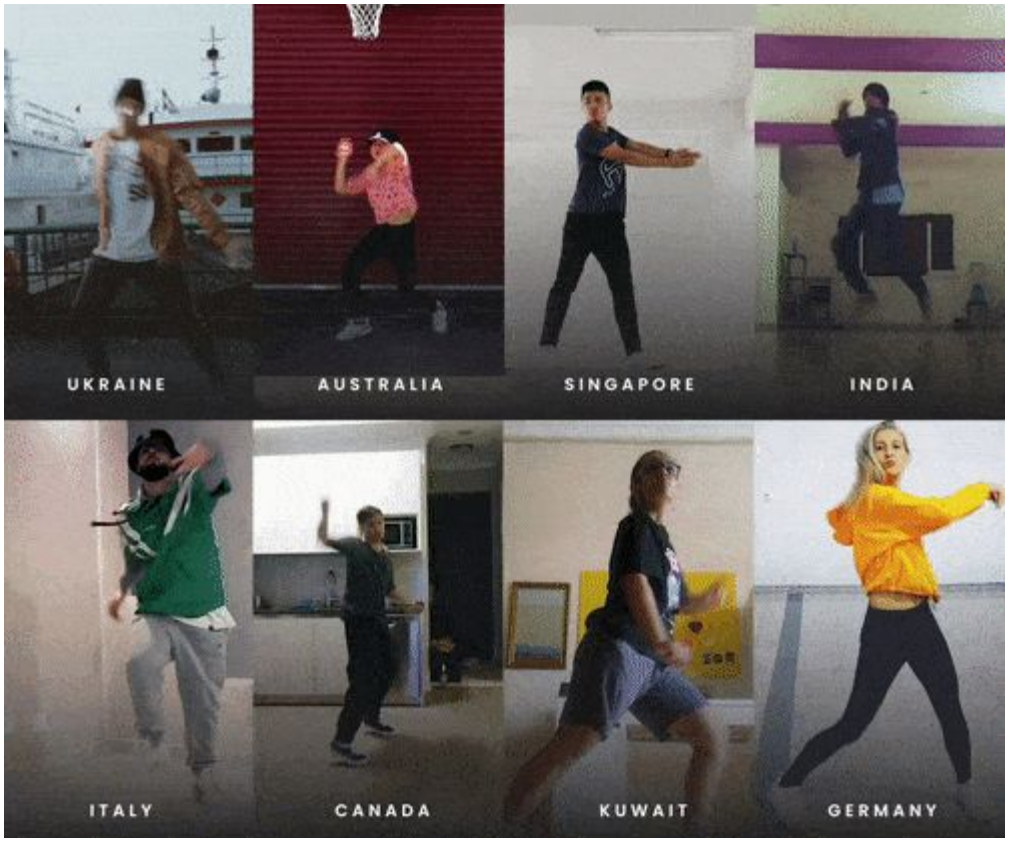
Nested for loops:
MULTI-DIMENSIONAL



12
1
2
3
4
5
6
7
8
9
10
11

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




UKRAINE
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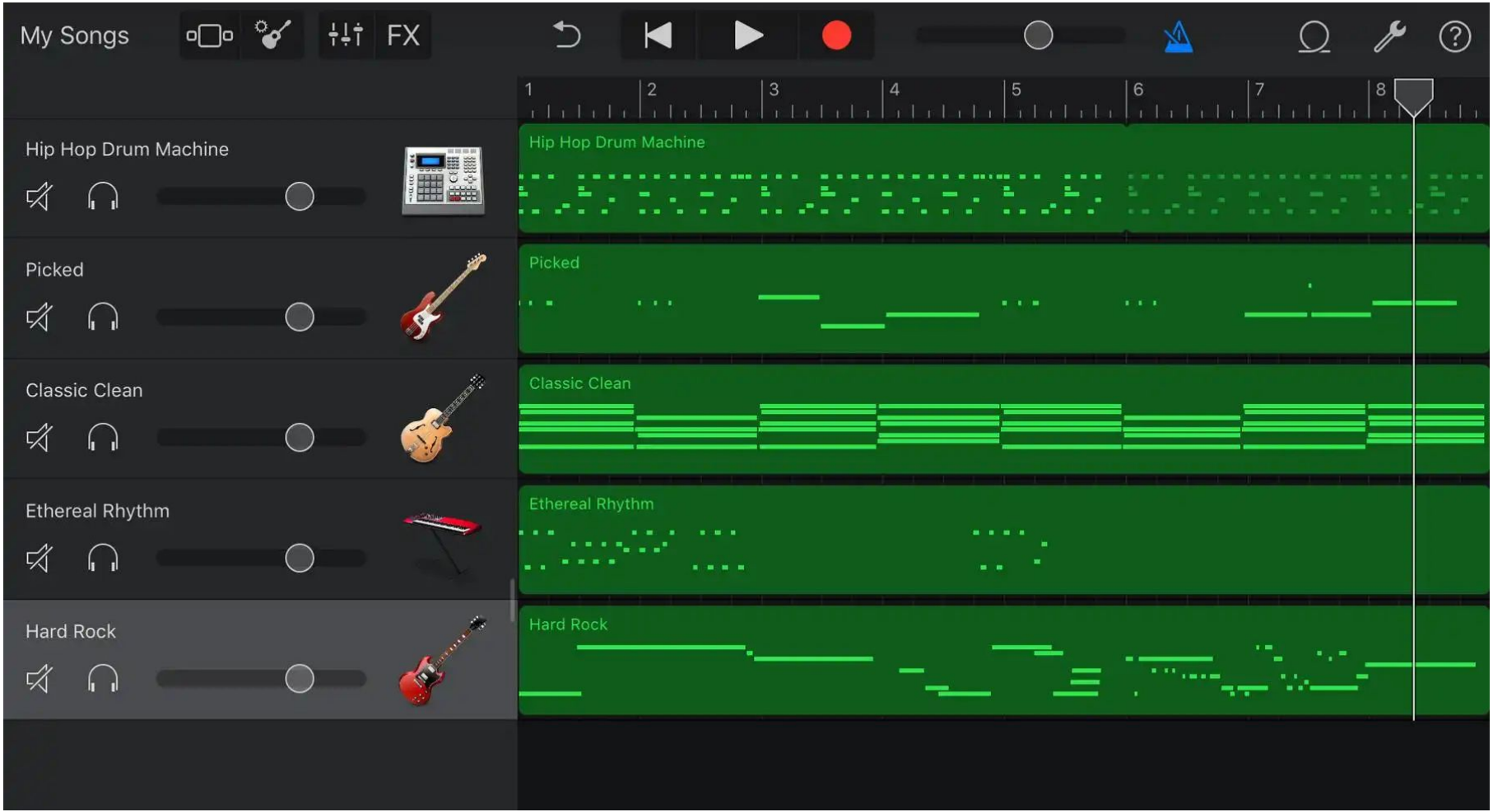
INDIA
ITALY
CANADA
KUWAIT
GERMANY


My Songs
FX
1
2
3
4
5
6
7
8
Hip Hop Drum Machine
Picked
Classic Clean
Ethereal Rhythm
Hard Rock

Special Pythagorean triplet

Problem 9

A Pythagorean triplet is a set of three natural numbers, $a < b < c$, for which,

$$a^2 + b^2 = c^2$$

For example, $3^2 + 4^2 = 9 + 16 = 25 = 5^2$.

There exists exactly one Pythagorean triplet for which $a + b + c = 1000$.
Find the product abc.

```
euler #9 answer: 31875000
```

“brute force”

using loops + computation power