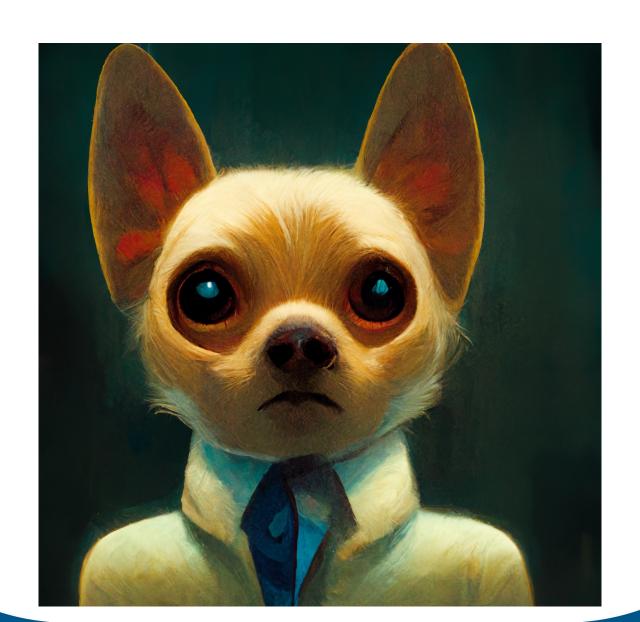
# CS210 Discussion

Week 11



## Attendance





#### Today

- Exercise hints
- Finish through exercise 2
  - Show us passing Gradescope tests to leave early
- Programming exam next week
  - Bring a book
  - You can work on CS210 classwork after you finish also
  - No social media, email, communication, etc.
  - Phones, headphones, earbuds, etc. must be put away
  - Open book, open note, open course website



# Graphs

 How do we represent a graph in Java?



## Graphs

- How do we represent a graph in Java?
  - Adjacency list
  - Etc.
- Each vertex is a number
- Undirected graphs have two entries for each edge
- Directed graphs only one
  - From  $\rightarrow$  To

0	1	
1	3	0
2		
3	1	



# Exercise 1 – Graph Properties

All together now



#### Exercise 2 Hints

- Do all your work in the constructor
  - Methods can simply return pre-computed values
- Three important things already imported, look at what methods they have available (either using IntelliJ or their documentation).
  - DiGraph
  - DiCycle
  - LinkedBag

