1: Chenjia & Desmond
2: Haitai & Sean
3: Austin & Jacqueline
4: Brandon & Tim
5: Christina & Adam
6: Nanbo & Qihua
7: CJ & TJ
8: Shane & Rahul
9: Qingyu & Jacob
10: Aakash & Hannah
11: Riley & Hannah
12: Leo
LOOPS

- For this lab you will be using loops
- The loop you should use for this lab is a while loop
- While loops are good for situations where you want something to happen UNTIL some condition is satisfied
- For loops are good for situations where you want a piece of code to execute a specific number of times
WHILE LOOPS

• Two key components:
  • Conditional (while SOMETHING)
  • Alter the condition (otherwise the loop will never end)

• Two helpful items:
  • break – will break out of the current loop
    • If your loops are nested, it will break your current loop
  • continue – will jump to the TOP of the loop from your current location
WHILE LOOPS

EXAMPLE ONE

while True:
    if something:
        break
    elif something:
        continue
    else:
        do something

EXAMPLE TWO

valid = True
while valid:
    if something:
        valid = False
    elif something:
        continue
    else:
        do something
KEY TO PROGRAMMING

• DEVELOP INCREMENTALLY
• Comment along the way
• Use descriptive variable names

INCREMENTAL DEVELOPMENT

• Every program is composed of smaller pieces
• Get one part working before moving on
• Use print statements to figure out where things are going wrong
LET’S TALK LAB – STEPS OF DEVELOPMENT

- Set up a while loop for input
  - Handle: 0 to quit
- Count evens & display count
- Count odds & display count
- Sum evens & odds and display count
- Ignore negative numbers
- Sum positive numbers
- Print message when negative number is entered
- Neaten up your code (FINAL STEP, mucho important)

The lab description has tons of helpful hints
READ CAREFULLY before asking questions!