Outline Oct 22:

• Mid-semester reminders
• Nested loops example
• Reading and Writing files
  • Handout 3
  • colleges_file.py
  • students_file.py

Notes

• Lab 6 due Saturday night
Mid-semester reminders
Mid-semester syllabus reminders

- Class attendance counts toward participation and a pattern of missing class will significantly lower your participation grade
Mid-semester syllabus reminders

• Class attendance counts toward participation and a pattern of missing class will significantly lower your participation grade
• Piazza counts toward participation
Mid-semester syllabus reminders

• Class attendance counts toward participation and a pattern of missing class will significantly lower your participation grade
• Piazza counts toward participation
• Academic integrity: you should not be looking at anyone else’s lab code, and should not be sharing your code with anyone else
Mid-semester syllabus reminders

• Class attendance counts toward participation and a pattern of missing class will significantly lower your participation grade
• Piazza counts toward participation
• Academic integrity: you should not be looking at anyone else’s lab code, and should not be sharing your code with anyone else
• Talk to me if you have any questions about what academic integrity means for a STEM course
Mid-semester syllabus reminders

• Class attendance counts toward participation and a pattern of missing class will significantly lower your participation grade
• Piazza counts toward participation
• Academic integrity: you should not be looking at anyone else’s lab code, and should not be sharing your code with anyone else
• Talk to me if you have any questions about what academic integrity means for a STEM course
• We are running MOSS which detects similar code
Mid-semester syllabus reminders

• Class attendance counts toward participation and a pattern of missing class will significantly lower your participation grade

• Piazza counts toward participation

• Academic integrity: you should not be looking at anyone else’s lab code, and should not be sharing your code with anyone else

• Talk to me if you have any questions about what academic integrity means for a STEM course

• We are running MOSS which detects similar code

• Computer Science policy is to bring all offenses directly to the College Judiciary Committee (CJC)
Nested Loops &
New way of doing for loops
for <item> in <sequence>: 

  variable name

for ch in name:

for i in range(len(name)):

  ch = name[i]

  str
  list
  range
  ch = "5"
  ch = "3"
  ch = "a"

  i = 0
  i = 1
  i = 2

shortcut

flexible
def main():


    # outer for loop goes over the names in a section
    for name in section2:
        star = '*'  # set up accumulator

        # inner for loop goes over the characters in each name
        for ch in name:
            star += ch + '*'

        print(star)

main()
Reading Files
<table>
<thead>
<tr>
<th>Name</th>
<th>F/M</th>
<th>Params</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>open</code></td>
<td>F</td>
<td>Str, str</td>
<td>&quot;file&quot;</td>
</tr>
<tr>
<td><code>&lt;str&gt;.split</code></td>
<td>M</td>
<td>Str, <code>str</code></td>
<td>list</td>
</tr>
<tr>
<td><code>int</code></td>
<td>F</td>
<td>Str, float, int</td>
<td>int</td>
</tr>
<tr>
<td><code>&lt;list&gt;.append</code></td>
<td>M</td>
<td><code>anything!</code></td>
<td>none</td>
</tr>
<tr>
<td><code>&lt;&quot;file&quot;.close</code></td>
<td>M</td>
<td>none</td>
<td>none!</td>
</tr>
<tr>
<td><code>min</code></td>
<td>F</td>
<td>list</td>
<td>int/float/str</td>
</tr>
<tr>
<td><code>max</code></td>
<td>F</td>
<td>list</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td><code>sum</code></td>
<td>F</td>
<td>list</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td><code>len</code></td>
<td>F</td>
<td><code>sequence</code></td>
<td>int</td>
</tr>
<tr>
<td><code>print</code></td>
<td>F</td>
<td><code>anything!</code></td>
<td>none</td>
</tr>
</tbody>
</table>
Programs for today

• inclass/w07/colleges_file.py
  • data file: colleges.txt

• inclass/w07/students_file.py
  • data file: students.txt