

Lab 9: Lists

- **List**

- container of values that can be accessed by indices
- created with square brackets []
- access an element in the list with the list's name and square brackets
 - get the element at index i:
`value = aList[i]`
 - change the list at index i:
`aList[i] = 4`
- `.append(element)` – add the element to the end of the list
- `.insert(loc, element)` – add the element to the location
- `.pop(loc)` – remove the element at the location

- **listThings.py**

- **product** – calculates and returns the product of all the values in the list
- **countOdds** – counts and returns the number of odd values in the list
- **squares** – creates and returns a new list containing the squares of all the values in the original lists
- **computeAltSum** – calculates and returns the alternating sum
- **replaceNegatives** – alters the list by changing all the negative values to 0
- **shiftRight** – alters the list so that all the values are shifted right

- **testListThings.py**

- finish the tester

- Don't forget to show me!