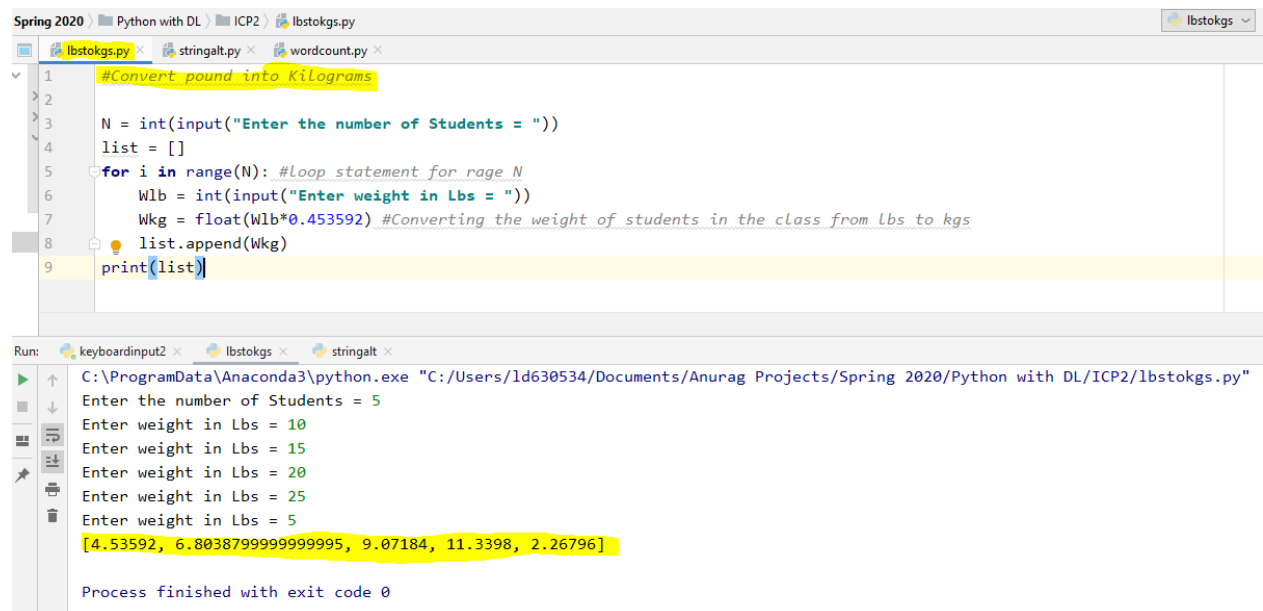


Video Link: <https://www.loom.com/share/0841bb46b85144a598f8b267c6f165aa>

1. Write a program, which reads weights (lbs.) of N students into a list and convert these weights to kilograms in a separate list using:
 - 1) Loops and
 - 2) List comprehensions N: No of students (Read input from user)

Ex: L1: [150,155, 145, 148]

Output: [68.03, 70.3, 65.77, 67.13]



The screenshot shows a Python IDE with a file named 'lbstokgs.py'. The code in the file is as follows:

```
1 #Convert pound into Kilograms
2
3 N = int(input("Enter the number of Students = "))
4 list = []
5 for i in range(N): #Loop statement for range N
6     Wlb = int(input("Enter weight in Lbs = "))
7     Wkg = float(Wlb*0.453592) #Converting the weight of students in the class from lbs to kgs
8     list.append(Wkg)
9 print(list)
```

The output window shows the following execution:

```
Run: keyboardinput2 x lbstokgs x stringalt x
C:\ProgramData\Anaconda3\python.exe "C:/Users/ld630534/Documents/Anurag Projects/Spring 2020/Python with DL/ICP2/lbstokgs.py"
Enter the number of Students = 5
Enter weight in Lbs = 10
Enter weight in Lbs = 15
Enter weight in Lbs = 20
Enter weight in Lbs = 25
Enter weight in Lbs = 5
[4.53592, 6.8038799999999995, 9.07184, 11.3398, 2.26796]
Process finished with exit code 0
```

2. Write a program that returns every other char of a given string starting with first using a function named "string_alternative"

Str = "Good evening"

Output: Go vnn

Note: You need to create a function named "string_alternative" for this program and call it from main function.

The screenshot shows a Python IDE with a file named `stringalt.py`. The code defines a function `string_alternative()` that takes a string input and prints characters at even indices. The program is executed, and the input string is `ICP_Lab_2_Problem_2_C_a_r_b_e_`. The output shows characters at even indices: `I`, `P`, `_`, `L`, `a`, `_`, `r`, `_`.

```
1 #string alternative and call it from main function
2
3 String = input("Enter String =")          #this is input string
4 def string_alternative():
5     Output = ""
6     for i in range(len(String)):
7         if (i%2==0):                      #even index checking
8             Output = Output+String[i]
9         print(Output)
10    string_alternative()

string_alternative() > for i in range(len(String)) > if (i%2==0)
```

Run: keyboardinput2 × lbstokgs × stringalt ×

C:\ProgramData\Anaconda3\python.exe "C:/Users/ld630534/Documents/Anurag Projects/Spring 2020/Python

Enter String = ICP_Lab_2_Problem_2

C_a_r_b_e_

Process finished with exit code 0

-
3. Write a python program to find the word count in a file for each line and then print the output. Finally store the output back to the file.

Input: a file includes two line
Python Course
Deep Learning Course

Output:
Python: 1
Course: 2
Deep: 1
Learning: 1
Note: Your program should work for any number of lines.

```
Spring 2020 > Python with DL > ICP2 > wordcount.py
lbstokgs.py x stringalt.py x wordcount.py x
1 #Word count in file
2
3 file = open('icp2file.txt','r')
4 Count= dict() #create new dictionary
5 for line in file: # Loop through each line of the file
6     words= line.strip().split(" ") #Split the line into words
7     for word in words:
8         if word in Count: #Check word in dictionary is present
9             Count[word] = Count[word]+1
10        else:
11            Count[word] = 1
12    print (Count)
13    output= open("icp2file.txt",'a') #Storing output to the same file"
14    output.write(str(Count))

Run: keyboardinput2 x lbstokgs x wordcount x
C:\ProgramData\Anaconda3\python.exe "C:/Users/ld630534/Documents/Anurag Projects/Spring 2020/ICP2/wordcount.py"
{'Python': 1, 'Course': 2, 'Deep': 1, 'Learning': 1}

Process finished with exit code 0
```

icp2file - Notepad

File Edit Format View Help

Python Course

Deep Learning Course

{'Python': 1, 'Course': 2, 'Deep': 1, 'Learning': 1}
