

Assignment 3

February 10, 2020

1 Assignment 3

1.1 Problem 1

Create a python function `summer(n)`. Its single parameter is a positive integer. The function returns the sum of all the integers between 1 and `n` inclusive which are multiples of 3 or 5. Test it with the input values 10, 150, and 975.

```
[30]: def summer(n):  
    sum = 0  
    threeAndFive = []  
    for i in range(n):  
        if i%3 == 0 or i%5 == 0:  
            threeAndFive.append(i)  
            sum += i  
    #print(threeAndFive)  
    print("The result of summer(10) is", sum)  
  
summer(10)  
summer(150)  
summer(975)
```

The result of `summer(10)` is 23

The result of `summer(10)` is 5175

The result of `summer(10)` is 221325

1.2 Problem 2

Write a python program which reads the file “Pride and Prejudice.txt” and produces a list of all of the lines in the file which contain either the word “and” or the word “the”. Be careful to see these words even if they are capitalized. Also be careful to see the first letters of “these” or “there” as the word “the”. Print the first 10 lines in this list.

```
[18]: with open('Pride and Prejudice.txt') as PandP:  
    andThe = []  
    count = 0  
    for line in PandP:
```

```
        if 'the ' in line or 'and ' in line or 'The' in line or 'And' in line_
↳or 'THE' in line or 'AND' in line:
            andThe.append(line)
for i in range(10):
    print(andThe[i])
```

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Title: Pride and Prejudice

*** START OF THIS PROJECT GUTENBERG EBOOK PRIDE AND PREJUDICE ***

PRIDE AND PREJUDICE

However little known the feelings or views of such a man may be on his
first entering a neighbourhood, this truth is so well fixed in the minds
of the surrounding families, that he is considered the rightful property
"But it is," returned she; "for Mrs. Long has just been here, and she