

Assignment 3

February 14, 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.

```
[10]: # Place your code here.
def summer(n):
    asum = 0
    for i in range(1,n+1):
        if i%3==0 or i%5==0:
            asum = asum + i
    return asum

print(summer(10))
print(summer(150))
print(summer(975))
```

```
33
5325
222300
```

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.

```
[11]: # Place your code
fhand = open("Pride and Prejudice.txt","r")
theandlist = []
linelist = []
for line in fhand:
    words = line.lower().split()
```

```
if 'the' in words or 'and' in words:
    theandlist.append(line)

for linenum in range(10):
    print(theandlist[linenum])
```

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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

[0]:

[0]: