Assignment 3

February 11, 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.

```python
[11]: def summer(n):
          sum = 0
          threeAndFive = []
          for i in range(n+1):
              if i%3 == 0 or i%5 == 0:
                  threeAndFive.append(i)
                  sum += i
          #print(threeAndFive)
          print("The result of the sum between 1 and",n ,":", sum)

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

```
The result of the sum between 1 and 10 : 33
The result of the sum between 1 and 150 : 5325
The result of the sum between 1 and 975 : 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 carefult to see these words even if they are capitalized. Also be careful to to see the first letters of "these" or "there" as the word "the". Print the first 10 lines in this list.

```python
[8]: 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(i+1,". ",andThe[i])
```

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6 .   PRIDE AND PREJUDICE

7 .   However little known the feelings or views of such a man may be on his

8 .   first entering a neighbourhood, this truth is so well fixed in the minds

9 .   of the surrounding families, that he is considered the rightful property

10 .   "But it is," returned she; "for Mrs. Long has just been here, and she