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CS 417/ Dr. Kranz

Assignment 3 outputs

## Question 1

```
In [2]: runfile('/Users/loganheck/untitled0.py', wdir='/Users/loganheck')
Count for 'Right' (case-insensitive): 7
Count for 'Rights' (case-insensitive): 5

Top 25 words:
the -> 133
of -> 106
to -> 70
and -> 61
for -> 33
import -> 29
a -> 27
our -> 27
in -> 22
their -> 22
has -> 21
us -> 20
he -> 19
declaration -> 18
archives -> 17
nbsp -> 17
them -> 15
by -> 13
documents -> 13
is -> 13
these -> 13
have -> 12
that -> 12
all -> 11
it -> 11
```

**Question 2**

```
In [5]: runfile('/Users/loganheck/Documents/Intro to object
oriented programming/untitled1.py', wdir='/Users/loganheck/
Documents/Intro to object oriented programming')
Enter month number (1–12):
1
Enter start weekday (0=Sun, 1=Mon, ..., 6=Sat):
2

January
Su Mo Tu We Th Fr Sa
         1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30 31
```

```
In [6]: runfile('/Users/loganheck/Documents/Intro to object
oriented programming/assign. 3, question 2.py', wdir='/Users/
loganheck/Documents/Intro to object oriented programming')
Enter month number (1–12):
5
Enter start weekday (0=Sun, 1=Mon, ..., 6=Sat):
6

May
Su Mo Tu We Th Fr Sa
                  1
 2  3  4  5  6  7  8
 9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
30 31
```

**Question 3**

```
In [7]: runfile('/Users/loganheck/Documents/Intro to object
oriented programming/untitled2.py', wdir='/Users/loganheck/
Documents/Intro to object oriented programming')
Enter a string:
3
You entered: 3
Number of characters: 1

In [8]: runfile('/Users/loganheck/Documents/Intro to object
oriented programming/assign.3, question3.py', wdir='/Users/
loganheck/Documents/Intro to object oriented programming')
Enter a string:
123445
You entered: 123445
Number of characters: 6
```

**Question 4**

```
In [9]: runfile('/Users/loganheck/Documents/Intro to object
oriented programming/untitled3.py', wdir='/Users/loganheck/
Documents/Intro to object oriented programming')
Original DNA (first 60 chars):
TGGCCAGTAGATCTTCCCAACATAGCCTAGCTGGACATATTCACTAAACCGAACAATCTA

Mutated DNA (first 60 chars):
TGGCCAGTGGATCTTCCCAACATAGTCTAGCTGTAGATAATCACTACACCGAACAATCTA

Before mutation:
Frequency Table (showing first 16 positions):
A : [0, 0, 0, 0, 0, 1, 0, 0, 1, 0, 1, 0, 0, 0, 0, 0]
C : [0, 0, 0, 1, 1, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 1]
G : [0, 1, 1, 0, 0, 0, 1, 0, 0, 1, 0, 0, 0, 0, 0, 0]
T : [1, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, 0, 1, 1, 0]

After mutation:
Frequency Table (showing first 16 positions):
A : [0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0]
C : [0, 0, 0, 1, 1, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 1]
G : [0, 1, 1, 0, 0, 0, 1, 0, 1, 1, 0, 0, 0, 0, 0, 0]
T : [1, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, 0, 1, 1, 0]
```