

Project 8 Solutions

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Peer Collaborators (if any) and nature of the collaboration: Natalie McGuckin and Jayla Langford (We worked together with the TA)

TA help sought (if any): Jun and Kevin

Online resources used (if any) and weblink for location of resources:

1a. (3 pts)

Comment about method of solution:

Here is the number of airplane flights that originate from a specific airport for 1987-2019.

Solution itself:

```
#!/bin/bash
```

```
for flights in {1987..2019}
```

```
do
```

```
    cat /class/datamine/data/flights/$flights.csv | cut -d, -f15 | grep $1 | wc -l
```

```
done
```

2a. (3 pts)

Comment about method of solution:

#Here is the number of donations in a State from 1980-2020 for each even numbered year. I chose to run IN.

Solution itself

```
#!/bin/bash
```

```
for ((election = 1980 ; election <= 2020 ; election+=2))
```

```
do
```

```
cat /class/datamine/data/election/itcont$election.txt | cut -d"|" -f10 | grep $1 | wc -l
```

```
done
```

3a. (4 pts)

Comment about method of solution:

#Here I printed the average for the total cost of a yellow taxi cab ride from January 2017 to December 2018

Solution itself

```
#!/bin/bash
```

```
for year in {2017..2018}
```

```
do
```

```
    for month in {01..12}
```

```
    do
```

```
        cat /class/datamine/data/taxi/yellow/yellow_tripdata_${year}-${month}.csv | awk -F, '{total+=$17;count+=1} END{print total/count}'
```

```
    done
```

```
done
```