```
studentCode.py
                get data.pv
 1 import pickle
    from get_data import getData
 3
 4 def computeFraction( poi_messages, all_messages ):
            given a number messages to/from POI (numerator)
            and number of all messages to/from a person (denominator),
 6
            return the fraction of messages to/from that person
            that are from/to a POI
 8
       0.00
 9
10
11
12
        ### you fill in this code, so that it returns either
13
                the fraction of all messages to this person that come from POIs
        ###
14
        ###
                 or
15
                the fraction of all messages from this person that are sent to POIs
        ###
16
        ### the same code can be used to compute either quantity
17
18
        ### beware of "NaN" when there is no known email address (and so
19
        ### no filled email features), and integer division!
20
        ### in case of poi_messages or all_messages having "NaN" value, return 0.
21 -
        if poi_messages == 'NaN' or all_messages == 'NaN':
22
            fraction = 0.
23 -
        else:
24
            fraction = float(poi_messages)/float(all_messages)
25
        return fraction
26
```

Good job! Your output matches our solution.

Here's your output:

{'METTS MARK': {'from poi to this person': 0.04708798017348203. 'from this person to poi':



```
studentCode.py
                get data.py
    data_dict = getData()
28
    submit_dict = {}
30 - for name in data_dict:
31
32
         data_point = data_dict[name]
33
34
         print
35
         from_poi_to_this_person = data_point["from_poi_to_this_person"]
36
         to_messages = data_point["to_messages"]
37
         fraction_from_poi = computeFraction( from_poi_to_this_person, to_messages )
38
         print fraction_from_poi
39
         data_point["fraction_from_poi"] = fraction_from_poi
40
41
42
         from_this_person_to_poi = data_point["from_this_person_to_poi"]
         from_messages = data_point["from_messages"]
43
         fraction_to_poi = computeFraction( from_this_person_to_poi, from_messages )
44
         print fraction_to_poi
45
46
         submit_dict[name]={"from_poi_to_this_person":fraction_from_poi,
47
                            "from_this_person_to_poi":fraction_to_poi}
48
         data_point["fraction_to_poi"] = fraction_to_poi
49
    #############################
51 - def submitDict():
52
         return submit_dic
```

```
Good job! Your output matches our solution.

Here's your output:

{'METTS MARK': {'from poi to this person': 0.04708798017348203. 'from this person to poi':
```



from_tnis_person_to_poi":fraction_to_poi}





Thanks for completing that!

```
Good job! Your output matches our solution.

Here's your output:

{'METTS MARK': {'from_poi_to_this_person': 0.04708798017348203,

'from_this_person_to_poi': 0.034482758620689655}, 'BAXTER JOHN

C': {'from_poi_to_this_person': 0.0, 'from_this_person_to_poi':

0.0}, 'ELLIOTT STEVEN': {'from_poi_to_this_person': 0.0,

'from_this_person_to_poi': 0.0}, 'CORDES WILLIAM R':

{'from_poi_to_this_person': 0.013089005235602094,

'from_this_person_to_poi': 0.0}, 'HANNON KEVIN P':

{'from_poi_to_this_person': 0.03062200956937799,

'from_this_person_to_poi': 0.65625}, 'MORDAUNT KRISTINA M':

{'from_poi_to_this_person': 0.0, 'from_this_person_to_poi':

0.0}, 'MEYER ROCKFORD G': {'from_poi_to_this_person': 0.0,

'from_this_person_to_poi': 0.0}, 'MCMAHON JEFFREY':
```

```
poi':
Prson_to_poi': 0.0},

ORDES WILLIAM R':
ANNON KEVIN P':
'MORDAUNT KRISTINA M':

66666666666}, 'HAEDICKE
0.03142709943328181},
n_to_poi':
chis_person_to_poi':
0}, 'BLACHMAN JEREMY M':
```

