Definizione di una funzione che dato l'API di Twitter, la collection delle trending topics e delle available locations, dei tempi di secondi tra ogni request e di reset delle rate limit, prende dall'API di twitter i dati e inserisce senza duplicati le available locations con trends e i rispettivi trending topics nelle due collections.

```
1
     def getAndAddAvailableLocationsAndTrendingTopics(api_di_twitter,
2
                                                       collezione trending topics,
3
                                                       collezione available locations,
4
                                                       secondsBetweenEachAppRequestArg,
5
                                                       secondsToReset):
6
         dateNow = datetime.today().strftime('%Y-%m-%d')
7
         dateTimeNow = datetime.today().strftime('%Y-%m-%d-%H:%M:%S')
         woiedsWhereTrendsAvailable = api_di_twitter.trends.available()
9
10
         for available ocation in woiedsWhereTrendsAvailable:
11
12
             print("Adding", availableLocation['name'], "to the available locations collection.")
13
14
             # Inserimento locations in available locations collection
             locationRecord = {"locations_name": "Worldwide", "locations_woeid": 1, "countries": []}
15
16
             locationInDBquery = collezione_available_locations.find({'dateTime': {"$regex": str(dateNow) + '.*'}})
17
18
             locationInDB = ""
19
             for item in locationInDBquery:
20
                 locationInDB = item
21
22
             if len(locationInDB) == 0: # empty locationInDB
23
                 if availableLocation['placeType']['name'] != "Supername":
                     if availableLocation['placeType']['name'] == "Country":
24
25
                         locationRecord['countries'] = [
                             {"locations_name": availableLocation['name'], "locations_woeid": availableLocation['woeid'],
26
27
                              "towns": [1}1
28
                     else: # it's a town
29
                         locationRecord['countries'] = \
30
31
                                     "locations name": availableLocation['country'],
32
33
                                     "locations_woeid": availableLocation['parentid'],
34
35
36
                         towns = {"towns": [{"locations name": availableLocation['name'],
                                              "locations_woeid": availableLocation['woeid']}]}
37
38
                         locationRecord = {**locationRecord['countries'][0], **towns}
                 jsonRecord = {"dateTime": dateTimeNow, "locations": locationRecord}
39
                 collezione_available_locations.insert_one(jsonRecord)
40
```