In the form: masterdatasetnightlybatchcollections.csv, we got the school information like: the school's fax, phone, longitude, latitude, email and it locate's suburb name, LGA. Base on this form, we built a dictionary to store all the schools information.

In the form: 2015-2018-selective-high-schools-minimum-entry-scores.csv, we got each school's entry score. Using the school name, we can link entry scores to the main schools information dictionary.

In the form: 32180ds0001_2006-16.xls, we got the population density for each suburb. Using the suburb name, we can link population density to the main schools information dictionary.

In the form: LgaRankings_2013-2017_27_Offences.xlsx, we got the crime rate, rank and total crime numbers in each LGA from 2013 to 2017. Using LGA, we can link crime information to the main schools information dictionary.

Base on those four forms, we built a whole dictionary for all schools. And change it to jsonify type and send to mongoDB.

There is a part of database on mongoDB:

```
1  {
2      "_id": {
3          "$oid": "5b054fc608d71e2ab8657c24"
4      },
5      "school_name": "armidale_high_school",
6      "school_info": [
7          {
8              "fax": "6776 7424",
9              "phone": "6776 7466",
10             "surb_name": "armidale",
11             "longitude": "151.650348",
12             "latitude": "-30.519371",
13             "email": "armidale-h.school@det.nsw.edu.au",
14             "LGA": "armidale regional",
15             "score": [
16                 "160",
17                 "160",
18                 "160",
19                 "161"
20             ],
21             "crime_info": [
22                 {
23                     "year": 2013,
24                     "total": "199.0",
25                     "rate": "663.4881",
26                     "rank": "19.0"
27                 },
28                 {
29                     "year": 2014,
30                     "total": "197.0",
31                     "rate": "654.3763",
32                     "rank": "21.0"
33                 },
34                 {
35                     "year": 2015,
36                     "total": "205.0",
37                     "rate": "678.4261",
38                     "rank": "19.0"
39                 },
40                 {
41                     "year": 2016,
42                     "total": "152.0",
43                     "rate": "501.4681",
44                     "rank": "41.0"
45                 },
46                 {
47                     "year": 2017,
48                     "total": "183.0",
49                     "rate": "603.7412",
50                     "rank": "19.0"
51                 }
52             ]
53         }
```

```
1  {
2      "_id": {
3          "$oid": "5b054fc808d71e2ab8657c25"
4      },
5      "school_name": "gosford_high_school",
6      "school_info": [
7          {
8              "fax": "4323 3175",
9              "phone": "4325 2048",
10             "surb_name": "gosford",
11             "longitude": "151.341388",
12             "latitude": "-33.417183",
13             "email": "gosford-h.school@det.nsw.edu.au",
14             "LGA": "central coast",
15             "score": [
16                 "182",
17                 "180",
18                 "184",
19                 "186"
20             ],
21             "crime_info": [
22                 {
23                     "year": 2013,
24                     "total": "1179.0",
25                     "rate": "360.1804",
26                     "rank": "69.0"
27                 },
28                 {
29                     "year": 2014,
30                     "total": "1263.0",
31                     "rate": "382.942",
32                     "rank": "66.0"
33                 },
34                 {
35                     "year": 2015,
36                     "total": "1442.0",
37                     "rate": "433.6959",
38                     "rank": "52.0"
39                 },
40                 {
41                     "year": 2016,
42                     "total": "1759.0",
43                     "rate": "524.5908",
44                     "rank": "36.0"
45                 },
46                 {
47                     "year": 2017,
48                     "total": "1640.0",
49                     "rate": "489.1011",
50                     "rank": "44.0"
51                 }
52             ]
53         }
```