TASK NUMBER 1

Samingun Handoyo - 0880816

The downloaded data in ndarray format

- print(ndarr[15:])

- [{'sno': '1016', 'sna': '福營行政中心', 'tot': '42', 'sbi': '14', 'sarea': '新莊區', 'mday': '20201023105330', 'lat': '25.0241250', 'lng': '121.423870', 'ar': '四維路17號-20號', 'sareaen': 'Xinzhuang Dist.', 'snaen': 'Fuying Administration Center', 'aren': 'No.17, Siwei Rd./No.20, Siwei Rd.', 'bemp': '28', 'act': '1'}

- {'sno': '1017', 'sna': '西盛公園', 'tot': '36', 'sbi': '15', 'sarea': '新莊區', 'mday': '20201023105335', 'lat': '25.017113', 'lng': '121.428048', 'ar': '新莊區西盛街/西盛街201巷', 'sareaen': 'Xinzhuang Dist.', 'snaen': 'Xisheng Park', 'aren': 'Xisheng St./Ln. 201, Xisheng St.', 'bemp': '21', 'act': '1'}

- {'sno': '1018', 'sna': '忠誠里(北新路2段97巷)', 'tot': '40', 'sbi': '21', 'sarea': '新店區', 'mday': '20201023105344', 'lat': '24.974272', 'lng': '121.542779', 'ar': '北新路二段/北新路二段97巷', 'sareaen': 'Xindian Dist.', 'snaen': 'Zhongcheng Village (Ln. 97, Sec. 2, Beixin Rd)', 'aren': 'Sec. 2, Beixin Rd./Ln. 97, Sec. 2, Beixin Rd.', 'bemp': '17', 'act': '1'}

- {'sno': '1019', 'sna': '仁愛廣場', 'tot': '50', 'sbi': '12', 'sarea': '蘆洲區', 'mday': '20201023105338', 'lat': '25.090565', 'lng': '121.471621', 'ar': '民權路139號旁', 'sareaen': 'Luzhou Dist.', 'snaen': 'Renai Square', 'aren': 'No.139, Minquan Rd.', 'bemp': '38', 'act': '1'}

- {'sno': '1020', 'sna': '重陽國小', 'tot': '42', 'sbi': '12', 'sarea': '三重區', 'mday': '20201023105331', 'lat': '25.066245 ', 'lng': '121.484337 ', 'ar': '中正北路/三民街175巷', 'sareaen': 'Sanchong Dist.', 'snaen': 'Chong Yang Elementary School', 'aren': 'Zhongzheng N. Rd./Ln. 175, Sanmin St.', 'bemp': '24', 'act': '1'}]

print("The downloaded data in dataframe format")
Taiwan_Bike.tail()

	Id	Name	Total	Sbi	Strat	Day	Late	lng	Armd	Terminal	Snaen	Arean	Bemp	Action
15	1016	福營行政中心	42	13	新莊區	20201023111430	25.0241250	121.423870	四維路17號-20號	Xinzhuang Dist.	Fuying Administration Center	No.17, Siwei Rd./No.20, Siwei Rd.	29	1
16	1017	西盛公園	36	16	新莊區	20201023111435	25.017113	121.428048	新莊區西盛街/西盛街201巷	Xinzhuang Dist.	Xisheng Park	Xisheng St./Ln. 201, Xisheng St.	20	1
17	1018	忠誠里(北新路2段97巷)	40	22	新店區	20201023111445	24.974272	121.542779	北新路二段/北新路二段97巷	Xindian Dist.	Zhongcheng Village (Ln. 97, Sec. 2, Beixin Rd)	Sec. 2, Beixin Rd./Ln. 97, Sec. 2, Beixin Rd.	16	1
18	1019	仁愛廣場	50	12	蘆洲區	20201023111438	25.090565	121.471621	民權路139號旁	Luzhou Dist.	Renai Square	No.139, Minquan Rd.	38	1
19	1020	重陽國小	42	9	三重區	20201023111431	25.066245	121.484337	中正北路/三民街175巷	Sanchong Dist.	Chong Yang Elementary School	Zhongzheng N. Rd./Ln. 175, Sanmin St.	27	1

The data visualization process

```
Before sorted
[[38.    56.    46.    56.    40.    94.    34.    40.    68.    34.
  48.    52.    46.    52.    40.    42.    36.    40.    50.    42.  ]
 [65.789 69.643 32.609 58.929 57.5   35.106 23.529 27.5   20.588 26.471
  64.583 21.154 43.478 42.308 22.5   30.952 44.444 55.    24.    21.429]]
x has been sorted
[[34.    34.    36.    38.    40.    40.    40.    40.    42.    42.
  46.    46.    48.    50.    52.    52.    56.    56.    68.    94.  ]
 [26.471 23.529 44.444 65.789 57.5   27.5   22.5   55.    30.952 21.429
  32.609 43.478 64.583 24.    21.154 42.308 69.643 58.929 20.588 35.106]]
```

The Plot between Total and LeftRatio