## Functions description

### Funtion1(guardian):

* + 1. Functions: When you want to collect amount of news information that contains a keyword/with keyword conditions, you can use this function.

1. How to use?

There are four parameters in this function.

* fromdate: the starting date of the news collection (date of news is based on the publication date)
* todate: the end date of the news collection (same as the above)
* q: the query you want to collect. For example, if you want to collect news contain keywords: economy, immigration and us, your q can be: “economy AND immigration AND us”. It also supports OR and AND NOT.

The details of query you can make can refer this link: <https://open-platform.theguardian.com/documentation/>

File: function will output a file contains news information, you can customize the file name

1. What’s the output?

News id, section name, pillar name, content, web URL, keyword(input one), news title and date.

### Function2(guardian\_tag):

1. Functions: Tag is similar to the theme of this article. When you want to collect news information with these tags, you can use this function.
2. How to use it?

There are four parameters in this function. Three of them are similar meaning as the previous function.

* tag: the tag name, it supports several tags name as the same time. E.g. economy/politics

1. What’s the output?

keyword of the news, website title, webURL, tag(input one)

## Sections and Pillar description

### Table of sections names and pillar names

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | News | Opinion | Sport | Culture | Lifestyle |
| Section  Names | 1. Coronavirus 2. World news 3. UK news 4. Environment 5. Science 6. Global development 7. Football 8. Tech 9. Business 10. Obituaries | 1. The Guardian view 2. Columnists 3. Opinion videos 4. Letters | 1. Cricket 2. Rugby union 3. Tennis 4. Cycling 5. F1 6. Golf 7. US sports | 1. Books 2. Music 3. TV&Culture 4. Art&design 5. Film 6. Games 7. Classical 8. Stage | 1. Fashion 2. Food 3. Recipes 4. Love&sex 5. Health&fitness 6. Home&garden 7. Women 8. Men 9. Family 10. Travel 11. Money |

## Unsolved problem

We found that tags names might be more meaningful than section names. However, news content and tags are from different api link. It means that we can not obtain tag and news content as the same time. If we want to gain tags of that news, it may require us to extract its web title, can use web title to find the tag.