

## Homework 6 : Analyze Celebrity Deaths

(Deadline as per Canvas)

This homework deals with the following topics:

- The *pandas* module
- Loading data
- Joining data
- Querying data
- Summarizing
- Aggregate fu
- The *numpy* lib
- The *matplotlib*
- Data visualiza

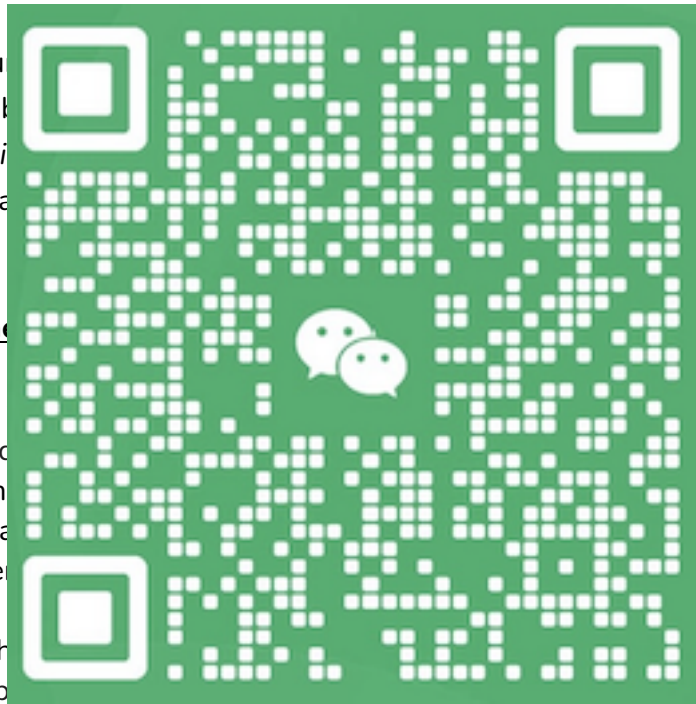
### General Idea of the

In this assignment, contains records of deaths from the *pandas* module. You will summarize data, create histograms and other

For each question, the code after each block

```
# your code here
```

Please use the exact variable name if it is specified in the comment.



ns\_2016.xlsx" which

You'll use functions

You are expected to

to visualize data using

Instructions and write

## About the Data

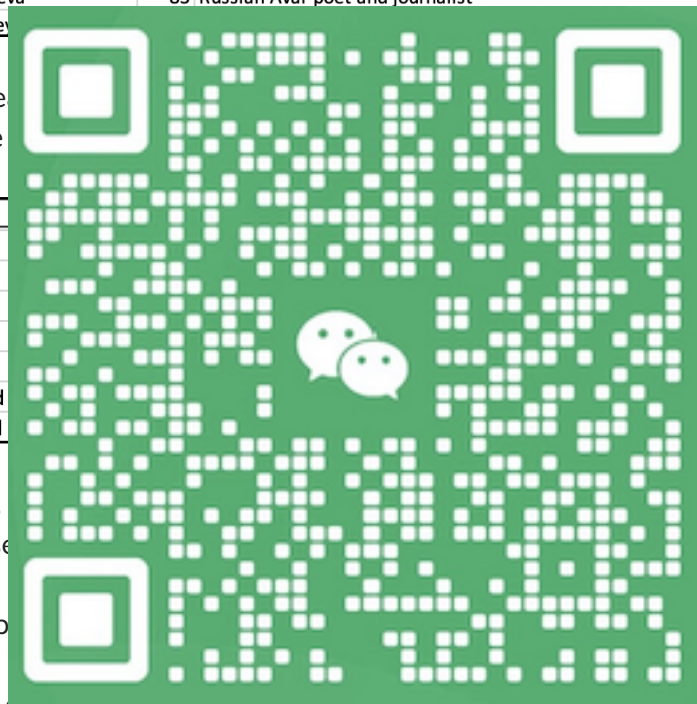
All of the data is contained within the “celebrity\_deaths\_2016.xlsx” file which contains 2 sheets:

- “celeb\_death”: contains records of deaths of famous humans and non-humans
  - There are 5 columns: date\_of\_death, name, age, bio, cause\_id

1	date of death	name	age	bio	cause_id
2	2016-01-01	Tony Lane	71	American art director (Rolling Stone)	8915
3	2016-01-01	Gilbert Kaplan	74	American conductor and businessman	2860
4	2016-01-01	Brian Johns	79	Australian company director, managing director of the Australian Broadcasting C	2860
5	2016-01-01	Natasha Aguilar	45	Costa Rican swimmer, silver and bronze medalist at the 1987 Pan American Gan	33897
6	2016-01-01	Fazu Aliyeva	83	Russian Avar poet and journalist	10648
7	2016-01-01	Mike Oxley		Representatives from	7674

- “cause\_of\_death”: contains records of causes of death
  - There are 3 columns: cause\_id, cause\_name, cause\_description

1	cause_id	cause_name
2	753	ALS
3	1039	bomb
4	1120	shot
5	1499	fall
6	1629	shot
7	2132	gored
8	2151	tased



During this exercise, you will use the “cause\_of\_death” data using the “cause\_id” column.

Other information about the data:

- The cause of death was not reported for all individuals
- The dataset might include deaths that took place in other years (you'll need to ignore these records)
- The dataset might contain duplicate records (you'll need to remove them)

## Submission

To complete the assignment, download *celebrity\_deaths\_2016.ipynb* and *celebrity\_deaths\_2016.xlsx*.

## Evaluation

Two points for each question.