**Grading Criterion of Assignment 1**

**Total Score:** 100 points

**Part 1:** **Collecting user's profile information (25 points):**

**Task:**

Given a list of user's IDs, please write a data crawler to collect the users' profile information.

**What to Turn In**:  
(1) A result file that contains the profile information of the Twitter users with the following IDs: 18165866, 26257166, 12579252.  
(2) The source code of your crawler to finish this task.

**Grade Criterion:**

1. Whether submitted codes can run successfully.

* Successfully: 7 points
* Unsuccessfully:

-- Authenticate function correctly: 2 points

-- Profile function correctly: 2 points

2. Whether result file contain the correct profile information.

* Contain: 6 point for each given ID, 6\*3=18 point in total.
* Not Contain:

-- For each given ID, only contain correct but incomplete profile information: 4 points.

-- For each given ID, contain complete but incorrect profile information: 4 points.

**Part 2:** **Collecting user's social network information: (25 points):**

**Task 2**:  
Given a list of user's IDs, please write a data crawler to collect the users' social network information (i.e., the lists of screen names of the user's friends and followers)

**What to Turn In**:  
(1) A result file that contains the social network information of the Twitter users with the following IDs: 18165866, 26257166, 12579252. Note: you only need to collect the first 20 followers and friends of a specified user in the result file.   
(2) The source code of your crawler to finish this task.

**Grade Criterion:**

1. Whether submitted codes can run successfully.

* Successfully: 7 points
* Unsuccessfully:

-- Authenticate function correctly: 2 points

-- Friend function correctly: 1 point

-- Follower function correctly: 1 point

2. Whether result file contain the correct social network information.

* Contain: 6 points for each given ID, 6\*3=18 points in total.
* Not Contain:

-- For each given ID, contain correct but incomplete friend social network information: 2 points.

-- For each given ID, contain correct but incomplete (less than 20) friend social network information: 2 points.

-- For each given ID, contain complete but incorrect friend social network information: 2 points.

-- For each given ID, contain complete but incorrect follower social network information: 2 points.

**Part 3.1:** **Collecting tweets in real-time filtered by specified keywords: (25 points):**

**Task 3.1**:  
Write a data crawler to collect tweets that contain one of the following two keywords: [Illinois, weather]

**What to Turn In**:  
(1) A result file of tweets that contain one of above two keywords (50 tweets will be enough and the result file size should be less than 1 M).   
(2) The source code of your crawler to finish this task.

**Grade Criterion:**

1. Whether submitted codes can run successfully.

* Successfully: 10 points.
* Unsuccessfully:

-- Authenticate function correctly: 4 points.

-- Keywords filter function correctly: 4 points.

2. Whether result file contain correct tweets filtered by keywords.

* Contain: 15 points.

**Part 3.2:** **Collecting tweets in real-time filtered by specified geo-location information: (25 points):**

**Task 3.2**:

Write a data crawler to collect tweets that originate from the geographic region around Champaign.

**What to Turn In**:  
(1) A result file of tweets that originate from the specified geographic region (50 tweets will be enough and the result file size should be less than 1 M).   
(2) The source code of your crawler to finish this task.

**Grade Criterion:**

1. Whether submitted codes can run successfully.

* Successfully: 10 points.
* Unsuccessfully:

-- Authenticate function correctly: 4 points.

-- Location filter function correctly: 4 points.

2. Whether result file contain correct tweets filtered by location information.

* Contain: 15 points.