Q1.

1. In the code editor, we've already stored the five rows as lists in separate variables. Group together the five lists in a list of lists. Assign the resulting list of lists to a variable named `app_data_set`.
2. Compute the average rating of the apps by retrieving the right data points from the `app_data_set` list of lists.
   - The rating is the last element of each row. You'll need to sum up the ratings and then divide by the number of ratings.
   - Assign the result to a variable named `avg_rating`.

```
row_1 = ['Facebook', 0.0, 'USD', 2974676, 3.5]
row_2 = ['Instagram', 0.0, 'USD', 2161558, 4.5]
row_3 = ['Clash of Clans', 0.0, 'USD', 2130805, 4.5]
row_4 = ['Temple Run', 0.0, 'USD', 1724546, 4.5]
row_5 = ['Pandora - Music & Radio', 0.0, 'USD', 1126879, 4.0]
```

Q2.

Open the `AppleStore.csv` file and store it as list of lists.

1. Open the file using the `open()` command. Save the output to a variable named `opened_file`.
2. Read in the opened file using the `reader()` command (we've already imported `reader()` for you from the `csv` module). Save the output to a variable named `read_file`.
3. Transform the read-in file to a list of lists using the `list()` command. Save the list of lists to a variable named `apps_data`.
4. Explore `apps_data`. You could:
   - Print its length using the `len()` command
   - Print the first row (the row describing column names)
   - Print the second and the third row (try to use list slicing here)

Q3.

Compute the average app rating for the apps stored in the `app_data_set` variable.

1. Initialize a variable named `rating_sum` with a value of zero outside the loop body.
2. Loop (iterate) over the `app_data_set` list of lists. For each of the five iterations of the loop (**for** each row **in** `app_data_set`):
3. Extract the rating of the app and store it to a variable named `rating`. The rating is the last element of each row.
4. Add the value stored in `rating` to the current value of the `rating_sum`.
5. *Outside* the loop body, divide the rating sum (stored in `rating_sum`) by the number of ratings to get an average value. Store the result in a variable named `avg_rating`.

```
row_1 = ['Facebook', 0.0, 'USD', 2974676, 3.5]
row_2 = ['Instagram', 0.0, 'USD', 2161558, 4.5]
row_3 = ['Clash of Clans', 0.0, 'USD', 2130805, 4.5]
row_4 = ['Temple Run', 0.0, 'USD', 1724546, 4.5]
row_5 = ['Pandora - Music & Radio', 0.0, 'USD', 1126879, 4.0]

app_data_set = [row_1, row_2, row_3, row_4, row_5]
```

Q4.

Compute the average app rating for all apps stored in `AppleStore.csv`.

1. Initialize a variable named `rating_sum` with a value of zero.
2. Loop through the `apps_data[1:]` list of lists (make sure you don't include the header row). For each of the 7,197 iterations of the loop (**for** each row **in** `apps_data[1:]`):
   - Extract the rating of the app and store it to a variable named `rating` (the rating has the index number `7`). Make sure you convert the rating value from a string to a float using the `float()` command.
   - Add the value stored in `rating` to the current value of the `rating_sum`.
3. Divide the rating sum (stored in `rating_sum`) by the number of ratings to get an average value. Store the result in a variable named `avg_rating`.

Q5.

Compute the average app rating for all apps stored in `AppleStore.csv`.

1. Initialize an empty list named `all_ratings`.
2. Loop through the `apps_data[1:]` list of lists (make sure you don't include the header row). For each of the 7,197 iterations of the loop:
   - Extract the rating of the app and store it to a variable named `rating` (the rating has the index number `7`). Make sure you convert the rating value from a string to a float.
   - Append the value stored in `rating` to the list `all_ratings`.
3. Compute the sum of all ratings using the `sum()` command.
4. Divide the sum of all ratings by the number of ratings, and assign the result to a variable named `avg_rating`.