

Test 1

MSDS 694, Diane Woodbridge

Description

Given the *app_name*, *input_file*, *output_file* and *partition_ct* in “user_definition.py”, complete the pyspark script “test1.py” to:

1. Load data into *partition_ct* (the number of partitions to load the input file).
2. Print the number of total lines in *input_file* (3pt).
3. Print the number of lines in each respective partition in separate lines (3pt).

Please see the output.txt for the detailed formatting.

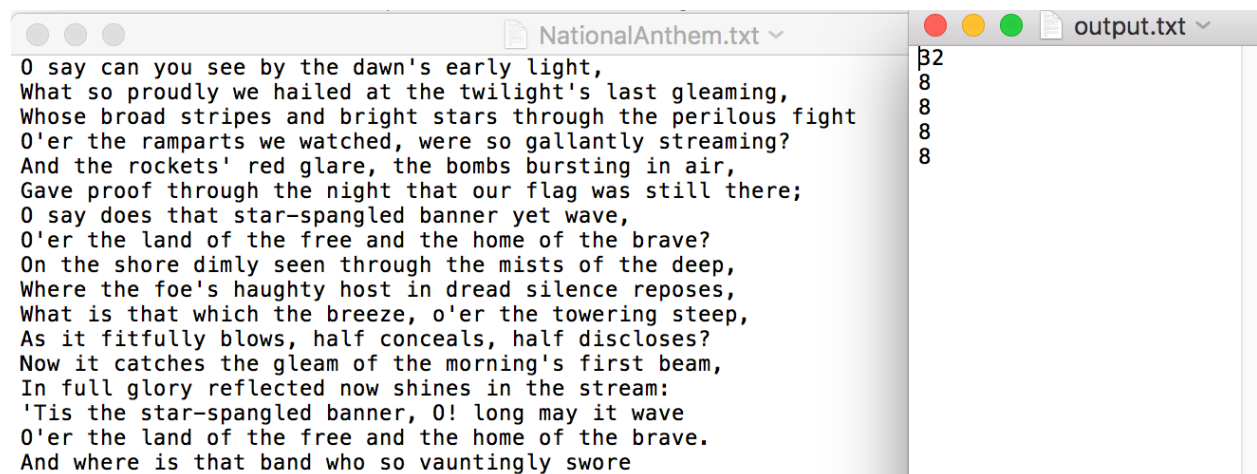
Please do not include any additional libraries other than those given in the file.

If you run `diff output.txt input_n/output.txt`, it should not return any messages.

Submit test1.py file (**ONLY**) - the name of your file should be test1_LastName_Firstname.py on Canvas. Make sure it runs in **Python 3.6** and **pyspark 2.3**.

We provide two example input files (input_1/NationalAnthem.txt, input_2/USF_Mission.txt) and corresponding output.txt. **Please do not hardcode app_name, input_file, output_file and partition_ct (They are given in the user_definition.py).**

If you run `spark-submit test1_Woodbridge_Diane.py`, the output should be **similar to the following**.



```

NationalAnthem.txt
0 say can you see by the dawn's early light,
What so proudly we hailed at the twilight's last gleaming,
Whose broad stripes and bright stars through the perilous fight
O'er the ramparts we watched, were so gallantly streaming?
And the rockets' red glare, the bombs bursting in air,
Gave proof through the night that our flag was still there;
O say does that star-spangled banner yet wave,
O'er the land of the free and the home of the brave?
On the shore dimly seen through the mists of the deep,
Where the foe's haughty host in dread silence reposes,
What is that which the breeze, o'er the towering steep,
As it fitfully blows, half conceals, half discloses?
Now it catches the gleam of the morning's first beam,
In full glory reflected now shines in the stream:
'Tis the star-spangled banner, O! long may it wave
O'er the land of the free and the home of the brave.
And where is that band who so vauntingly swore
...

output.txt
32
8
8
8
8
8
```