Annika Simovart Lab 10 Pseudocode

Classes:

- Date
- Location
- LocationDateLength

main()

1. Attempt to open query_file.txt; print an appropriate error message and exit if there is a failure.
2. Attempt to read two dates (DA and DB) from query_file.txt; print an appropriate error message and exit if there is a failure.
3. Create two instances of the user-defined Date type (DateA, DateB) from DA and DB.
4. Create two instances of the user-defined Location type (LocationA, LocationB) that match Cincinnati's place on the map.
5. Create two instances of the user-define LocationDateLength type (LDLA, LDLB) from LocationA/B and DateA/B.
6. Build two URL paths (build_url_path) (URLPathA, URLPathB) from the A/B date and location; print an appropriate error message and exit if there is a failure.
7. Download the day-length information from the Sunrise Sunset Web API (download) using URLPathA and URLPathB (store as ResultA, ResultB); print an appropriate error message and exit if there is a failure.
8. Extract the day lengths from ResultA and ResultB and store them in LDLA/LDLB using the parse_json_daylength_response function; print an appropriate error message and exit if there is a failure.
9. Using your implementation of the overloaded operator- for the user-defined LocationDateLength type to determine the difference in the number of seconds of daylight between the two days.
10. Convert that result from seconds to hours, minutes and seconds.
11. Print the proper output to the console.