Python Learning Exercise: To-Do App

Goal

Take a .json file and turn it into a to-do list app. Make code as reusable as possible by

writing functions that perform each of the tasks. This will come in handy during the later

stages of the project.

Tasks

Beginning

Read from the source.json file into a dictionary

For each object in source.json , create a new object with just the name of the task and a

completed boolean with a default value of False

Write the resulting tasks out to a new file, output.json

Intermediate

Create a function that reads and one that updates the contents of output.json

Create a function to mark a task as complete and re-write output.json

Create a function to add a new task to output.json

Create a function to list all incomplete tasks in output.json

Advanced

Create a CLI to interact with the project (feel free to use flags, but we recommend Click)

Change the program to write to a database (SQLite, preferably) rather than to

output.json Utilize other parts of source.json to do something cool!

overdue tasks

upcoming tasks (date / time range)

prioritize tasks

Super Advanced

Turn it into a server less cloud-hosted API

Sample source.json

{

“tasks”: [

{

“name”: “Paint the Shed”,

“created\_at”: 1568828579713,

“due\_date”: 1571420700000

},

{

“name”: “Replace the Lightbulbs”,

“created\_at”: 1571247900000,

“due\_date”: 1571420700000

},

{

“name”: “Trick or Treat!”,

“created\_at”: 1568828933331,

“due\_date”: 1572569100000

},

{

“name”: “Do Homework”,

“created\_at”: 1568828949452,

“due\_date”: 1568828579713

}

]

}