

Exercise 1

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In [4]: ▶ import csv

def filter_students(input_file, output_file):
    with open(input_file, mode='r') as file:
        csv_reader = csv.DictReader(file)
        filtered_students = [student for student in csv_reader if student[

    for student in filtered_students:
        student['Status'] = 'Passed' if student['Grade'] <= 'B' else 'Fail

    fieldnames = ['Name', 'Age', 'Grade', 'Status']
    with open(output_file, mode='w', newline='') as new_file:
        writer = csv.DictWriter(new_file, fieldnames=fieldnames)

        writer.writeheader()
        writer.writerows(filtered_students)

input_filename = 'students.csv'
output_filename = 'top_students.csv'

filter_students(input_filename, output_filename)
```

Practice Exercise

```
In [*]: ▶ import requests

api_url = "https://jian.sh/malaysia-api/state/v1/all.json"
response = requests.get(api_url)

try:
    malaysia_state_data = response.json()

    while True:
        interest_state = input('Enter the name of a state: ')

        found = False
        for state in malaysia_state_data:
            if interest_state.lower() == state['state'].lower():
                print("Population of " + state['state'] + ": " + str(state['population']))
                found = True
                break

        if not found:
            print("{} is not found in the data.".format(interest_state))

except Exception as e:
    print("Failed to retrieve data.")
```

Enter the name of a state: Johor
Population of Johor: 3794000
Enter the name of a state: UnknownState
UnknownState is not found in the data.

Enter the name of a state:

In []: ▶