

Project 9

CS 261

Save your program for this project as `<emailID>_project9.py` where `<emailID>` is the part of your Hampden-Sydney e-mail address before the `@` symbol. When you are finished, e-mail your program to `bclins@hsc.edu`. Your solution is due by noon on Friday, November 8.

Conference Registration

A local programming club is organizing their annual conference. The registration information for the people who are planning to attend is stored in the file

```
https://bclins.github.io/fall24/cs261/conference.json
```

To complete this project you will need to do the following things.

1. Import the `json` library and use the following commands to extract the contents of the file above as a dictionary:

```
file = open("conference.json")
registration_data = json.load(file)
```

2. The organizers of the conference plan on charging \$20 for everyone who registers, except seniors who only pay \$10. In addition, they are charging \$12 for anyone who signed up for lunch at the conference. For people who plan to eat dinner at the conference, there are three different meal options: beef, chicken, or vegetarian. The beef dinner costs \$32, while the chicken and vegetarian dinners both cost \$28. Write a function `registration_fees(person)` to calculate how much each person owes. Your function should input a dictionary with the registration information for one person, and output the total cost of their registration plus meals.
3. Write a function `meal_counts(registration_data)` that determines how many of each dinner option (beef, chicken, and vegetarian) is needed, and also how many lunches will be needed.
4. The caterers for the conference would like to know the names of the people who ordered vegetarian meals so that they can bring those meals out separately. Write a function called `get_vegetarians(registration_data)` that returns a list with the names of everyone who ordered a vegetarian dinner.

Hints

Be sure to carefully inspect how the data is stored in the `registration_data` dictionary. Make note of the types for each value.