# Homework 4

You must complete this assignment *without searching online*. You can use our class recordings, the textbook up to the current chapter, the Jupyter notebooks, conversations with your colleagues and me, and the approved resources; that’s all. This assignment should be completed with only the techniques we’ve covered in class so far. If you get code from anywhere besides your own brain, you need to cite the source in a comment.

Also, as always, **be sure to follow the style guide**, including turning in a plan with your code. Seriously, **don’t forget to plan *before* you code!**

1. Let’s say you have a friend who plans a lot of events, at a lot of different venues. Write a script that asks the user for the number of people attending an event, the number of seats available at each table in the venue (assume all tables are the same size), and the maximum number of tables available at the venue.

The program should output “This party won’t fit at this venue” or something similar if the available tables won’t fit the party size.

*If the party will fit*, the program should output the number of tables that will be required to seat the party. It should also output how many spaces the smallest table would have open, if all of the other tables were filled.

**Testing note:** I’ve given you example output below, and you should certainly run those numbers. Try some other numbers, too.

**Example program output (two separate runs):**

Hi, I'm here to help you plan events! Tell me how big your party is, how many tables the venue has, and how many chairs fit at each table, and I will help you determine how best to fit your party, if it's possible.

How many people do you expect? 80

How many tables does the venue have? 10

And how many chairs fit at each table? 15

You need 6 tables.

That will leave 10 seats open.

Hi, I'm here to help you plan events! Tell me how big your party is, how many tables the venue has, and how many chairs fit at each table, and I will help you determine how best to fit your party, if it's possible.

How many people do you expect? 80

How many tables does the venue have? 10

And how many chairs fit at each table? 7

I'm sorry, that party will not fit at that venue. Good luck!

1. Read sections 3.7-3.13 and 3.15 in the textbook. Bring questions to class.