

MGT 201: Winter 2024 (Homework #1)

Due on Tuesday, February 6th, 2024 (11:59pm) (note: 20% late penalty per day)

Submit the following three files (note: mark deductions for not submitting these files):

- 1. Jupyter Notebook (ipynb) file that shows your code and output
- 2. PDF and HTML files that shows your code and output

When you write your program, please add applicable comments with the hashtag (#) and/or with markdown cells so the grader can follow your work.

Sporting events such as hockey, basketball, soccer, and baseball usually organizes 50/50 draws the day of the game. Staff will ask fans at the sporting venue to buy tickets for a chance to win 50% of the total contribution for that game. The other 50% will be donated to a local charity. Each staff carries a device that accepts payment and issues tickets to the fans.

There are four different ticket combinations sold to the public: (1) 600 tickets for \$100; (2) 250 tickets for \$50; (3) 50 tickets for \$25, and (4) 10 tickets for \$15.

You will write a program that will collect data (i.e., read with the input function) for each transaction and will be able to calculate and report the total dollar amount collected as well as the total number of tickets sold. You will also be able to create a report that shows the number of purchases per ticket combination (i.e., the amount of 600-ticket, 250-ticket, 50-ticket, and 10-ticket combinations sold with the dollar amount collected per combination).

As data is collected (i.e., read with the input function), your program should be able to identify which staff member sold the tickets. This will allow your program to create a report that summarizes the total number of tickets sold and total dollar amount collected per staff member.

Your program assumes that the staff member can enter the data (i.e., read with the input function) for each transaction (e.g., staff employee ID, combination that was purchased per transaction, etc.,). Please note that the number of ticket combinations purchased during game day can vary. Your program should be able to check for errors (e.g., no negative purchases). As you develop your code, you can be creative in how you show your output.

Hint:

- You'll need to use loop and if statements in your solution
- You will use the input function so that the user can input data https://www.geeksforgeeks.org/python-input-function/ (Note: There are more examples in the file "MGT 201 Notes (120321) (Quercus)" found on pages 4 to 5.)