MATH 4332

Assignment# 8

Due: 10/27/2023, Friday, before 11:59pm Term <u>::Fall 2023</u>

Important Note: Please use only materials covered so far to solve your problems. You will be given zero if the materials used are not yet covered.

- 1. Write a program that asks the user to enter a person's name and then a list of course numbers that that person has taken. Do this five times. Create a dictionary from this where the keys are the names and the values are the lists of courses that person has taken. Then ask the user for a course name and use the dictionary to print out all the people who took that course.
- 2. Repeatedly ask the user to enter a team name and how many games the team won and how many they lost. Store this information in a dictionary where the keys are the team names and the values are lists of the form [wins, losses].
 - (a) Using the dictionary created above, allow the user to enter a team name and print out the team's winning percentage.
 - (b) Using the dictionary, create a list whose entries are the number of wins of each team.
 - (c) Using the dictionary, create a list of all those teams that have winning records.
- 3. Create a 5×5 list of numbers. Then write a program that creates a dictionary whose keys are the numbers and whose values are the how many times the number occurs. Then print the three most common numbers.