

# Instructions: Making Flashcards Using a Dictionary

This week we will be working on dictionaries, file input and string operations. If you have taken previous classes, you might recognize dictionaries as hash maps/tables. For everyone who hasn't seen them, they are basically look up tables, like our traditional dictionaries.

You will be given a textfile called **"database.txt"** which has comma-separated values. This file has a key-value pair for flashcards. The first value is the question/term and the second item is the answer/defintion. You will use this file for input in your program to read in all the answers and questions and fill a dictionary with all these pairs.

After making the dictionary, you will iterate through all the "flashcards" by printing the question and then having the user hit "Enter" to see the answer. You should iterate through all the terms.

Finally, you will allow the user to enter any question and provide them with the answer. You will use the look-up function of dictionaries for this.

Methods you will need to create:

## 1) **build\_dict(fileName : String) : Dictionary**

Takes in a filename as a string Returns a built dictionary object, based on file contents

- 1) Opens up the file and iterates through each line
- 2) For EACH line:
  - a) Separates the answer/question for each line based on a comma(",")
  - b) Stores each answer and question appropriate in the dictionary
- 3) Returns the dictionary

## 2) **check\_dict(key,dictionary)**

Takes in a string, term, to look up in the dictionary

Returns the answer if found, else returns "No match found"

- 1) IF term is in dictionary
  - Return answer
- ELSE
  - Return "No match Found"

## 3) **main( )**

- 1) Build dictionary by calling build\_dict(fileName)
- 2) Iterate through dictionary(HINT: For Each loop)
  - FOR EACH Key,Value Pair:
    - print question
    - prompt user to hit "Enter"
    - print answer
- 3) WHILE User does not enter stop:
  - Prompt user for a question/term to look up
  - Call check\_dict(userInput) and output return value

Expected input and output:

Let's review your flashcards!

Question: diversity

Press Enter to see the answer.

Answer:the practice or quality of including or involving people from a range of different social and ethnic backgrounds and of different genders/orientations

Press Enter for the next card.

Question: bias

Press Enter to see the answer.

Answer:cause to feel or show inclination or prejudice for or against someone or something

Press Enter for the next card.

Question: imposter syndrome

Press Enter to see the answer.

Answer:the experience of feeling like a phony—you feel as though at any moment you are going to be found out as a fraud

Press Enter for the next card.

Question: inclusion

Press Enter to see the answer.

Answer:a variety of people have a voice/power in decision-making or contributions

Press Enter for the next card.

Question: equity

Press Enter to see the answer.

Answer:fair treatment and opportunity for all people

Press Enter for the next card.

End of Deck. Redo all cards?(Y/N): N

Question Review time.

Enter Question(stop to end): error

Answer: No match found

Enter Question(stop to end): diversity

Answer: the practice or quality of including or involving people from a range of different social and ethnic backgrounds and of different genders/orientations

Enter Question(stop to end): bias

Answer: cause to feel or show inclination or prejudice for or against someone or something

Enter Question(stop to end): stop

End of Program.