Project 2 – Username Generator using Lists, Tuples, Sets, and Dictionaries - 30 points possible

Project Requirements

Name of program file:	username_generator.py
Description of program:	This program will test your knowledge of concepts from both week 1 and week 2. You will learn about and work with Lists, Tuples, Dictionaries and Sets while continuing to build your knowledge of strings, numbers, and comments. This program will use 3 different list (that you will create) that contain information about employees. This program will take input from 3 different list that you create. The first list will contain 5 first names, the second list will contain 5 last names, and the third list will contain 5 birth years. These lists will be combined and then used to create a unique username. You will remove any duplicate usernames (you must have at least one in the original list). You will also create a dictionary to store the username in as a key with the combined employee data created in the combination process. **You must use lists, a tuple, a set and a dictionary.**
Program Requirements:	The program MUST follow the input, process, output model described in the syllabus video and the introduction to programming pdf. You MUST follow the structure outlined or you will lose points. This program will need the import statements for username and today's date. This program must have a flower box comment section with your name, date created, and description of the program **(FYI: Not My Description from Above)** **Input section:** List of employees' first names List of employees' last names List of employees' birth years Each list should have at least 5 elements **Process section:** Combine all data for processing *hint zip()* Within a for in loop do the following:

	1. Use that information to create employee usernames in the following format: first initial last name year of birth i.e. Dale Fontenot 1963 = dfontenot63 2. Store the usernames in a list 3. Store the combined employee information in a dictionary with the username as the key Remove any duplicate usernames *hint: set()* Convert the set back to a list Within a for in loop do the following: • Make a copy of the username list without the duplicates **Output section:** You must then output the following information in this order: Username Today's Date All Zip data Username list with all usernames (even the duplicates) Username set Username list with no duplicates Employee data dictionary Username list that has been sorted
What to turn in:	Take a screen shot of your **RUNNING** program Upload the screen shot and the **py** file to blackboard as **TWO** separate files.

Assignment Template

assignment_template.py

```
#Import Section

from datetime import date   #import this for Date
import getpass              #import this for User

#Flower Box Section

#########################################################
#
#   Name:  Dale Fontenot
#   Date:  01/23/2022
#   Program Description:
#
#   Describe as completely as possible
#   what the program does including what inputs, processes
#   and outputs
#
#########################################################

#Variables section

    #All variables needed for will be declared here

#Functions section

    #Starting on project 4 all functions created will be in this section

#Input section

    #All input logic will be in this section
    #Make sure to use line comments to fully explain the inputs


#Process section

    #All processing of user input and calculations will be in this section
    #Make sure to use line comments to fully explain how the data is being processed


#Output section

    #Your Username and Today's Date will be in this section and ALWAYS First
    #All output in the form of print functions will be in this section
    #Make sure to use line comments to fully explain what is being displayed and how it is formatted


```

Input

```
first_name_list = ["Dale","Debbie","John","Dave","Mike"]
last_name_list = ["Fontenot","Fontenot","Doe","Dane","Roberts"]
year_born_list = ["1963","1963","1965","1966","1967"]
```

Output

```
dfontenot
2022-01-24
[('Dale', 'Fontenot', '1963'), ('Debbie', 'Fontenot', '1963'), ('John', 'Doe', '1965'), ('Dave', 'Dane', '1966'), ('Mike', 'Roberts',
'1967')]
['dfontenot63', 'dfontenot63', 'jdoe65', 'ddane66', 'mroberts67']
{'jdoe65', 'dfontenot63', 'mroberts67', 'ddane66'}
['jdoe65', 'dfontenot63', 'mroberts67', 'ddane66']
{'dfontenot63': ('Debbie', 'Fontenot', '1963'), 'jdoe65': ('John', 'Doe', '1965'), 'ddane66': ('Dave', 'Dane', '1966'), 'mroberts67':
('Mike', 'Roberts', '1967')}
['ddane66', 'dfontenot63', 'jdoe65', 'mroberts67']
```