

Your task:

Employee.py, Write a class named Employee that holds the following data about an employee in attributes: name, ID number, department, and job title.

Driver.py, Once you have written the class, write a program that creates three Employee objects to hold the following data:

Name	ID number	Department	Job Title
Susan Meyers	47899	Accounting	Vice President
Mark Jones	39119	IT	Programmer
Joy Rogers	81774	Manufacturing	Engineer

You should save these records into a dictionary, where the ID number is the key and the object(name, ID, department, job title) is the value. Your driver program should then call the “save_employee” function, as described below to dump the dictionary’s data into a file named “employee.dat”. (check notes 10/05).

Your driver program should also have the following functions:

**feel free to create other functions if needed*

1. *load_employees()*, this function should open a file, load all file data to a dictionary (check notes). The dictionary with file data should be returned to the function call. You should verify if the file is openable, if file cannot be opened, then return an empty dictionary. (use IOError exception)
2. *get_user_choice()*: this function should display a menu as shown below and verify user input to make sure user choice entered is between 1 and 5.
3. *look_up(employee_dict)*: this function first accepts the dictionary loaded from *load_employees()* function. It then ask user to enter an employee ID number, and searches through the dictionary for the employee ID number, if the ID number is not found, display a message: “The specified ID number was not found.”
4. *add(employee_dict)*: this function asks user to enter an employee’s name, ID department, and title. The function will create an employee object with the user specified data and save all data to the dictionary—employee_dict. If the ID already exists, you should display an error message “An employee with that ID already exists.”
5. *change(employee_dict)*: this function asks user to enter an employee’s ID number, and checks if that ID already exists. If so, ask user to enter a new name, new department and a new title. and update the record from the dictionary, otherwise, display a message “The specified ID number was not found.”
6. *delete(employee_dict)*: this function asks user to enter an employee’s ID number, and checks if that ID exists in the dictionary, if so, then delete the element, otherwise, display a message “The specified ID number was not found.”
7. *save_employees(employee_dict)*: this function opens the “employee.dat” again for writing as a binary file. It should dump the dictionary’s data into the file.
8. *main*: main function should first load data into a dictionary object from file “employee.dat”, and then calls above mentioned functions for each menu choice. When user enters 5 or quit option, main function should then call save_employees function to save the data to the file.