**CSCE 110: Programming I**

**Lab 8**

**General Instructions:**

* The lab is due online by 11:59 pm of the due date. The assignment must be typed, not handwritten, or scanned.
* Make sure you understand everything in this lab before getting started. Also, make sure that your programs match the output exactly as given for each question. This is important as one of the keys to being a good programmer is attention to detail.
* Grading is based on correctness and clarity.
* **Copying work from another source and submitting it as your own is plagiarism and a violation of the code of honor. The minimum penalty for plagiarism is a grade of zero and will be reported to the Aggie honor system office.**

**Lab Questions**

1. In a Python file named Employee.py, write a class named Employee that holds the following data about an employee in attributes: name, ID number, department, and job title. Once you have written the class, in a file named L8q1.py, create a program that stores Employee objects in a dictionary. Use the employee ID number as the key. The program should present a menu that lets the user perform the following actions:

• Look up an employee in the dictionary

• Add a new employee to the dictionary

• Change an existing employee’s name, department, and job title in the dictionary

• Delete an employee from the dictionary

• Quit the program

The sample output showing the behavior of the program is shown below.

**Sample Output:**

1. Menu
2. ----------------------------------------
3. 1. Look up an employee
4. 2. Add a new employee
5. 3. Change an existing employee
6. 4. Delete an employee
7. 5. Quit the program
8. Enter your choice: 2
9. Enter employee name: Ann Chovies
10. Enter employee ID number: 123
11. Enter employee department: Accounting
12. Enter employee title: Vice President
13. The new employee has been added.
14. Menu
15. ----------------------------------------
16. 1. Look up an employee
17. 2. Add a new employee
18. 3. Change an existing employee
19. 4. Delete an employee
20. 5. Quit the program
21. Enter your choice: 2
22. Enter employee name: Barb Dwyer
23. Enter employee ID number: 456
24. Enter employee department: Manufacturing
25. Enter employee title: Engineer
26. The new employee has been added.
27. Menu
28. ----------------------------------------
29. 1. Look up an employee
30. 2. Add a new employee
31. 3. Change an existing employee
32. 4. Delete an employee
33. 5. Quit the program
34. Enter your choice: 2
35. Enter employee name: Lon Moore
36. Enter employee ID number: 789
37. Enter employee department: IT
38. Enter employee title: Programmer
39. The new employee has been added.
40. Menu
41. ----------------------------------------
42. 1. Look up an employee
43. 2. Add a new employee
44. 3. Change an existing employee
45. 4. Delete an employee
46. 5. Quit the program
47. Enter your choice: 1
48. Enter an employee ID number: 345
49. The specified ID number was not found
50. Menu
51. ----------------------------------------
52. 1. Look up an employee
53. 2. Add a new employee
54. 3. Change an existing employee
55. 4. Delete an employee
56. 5. Quit the program
57. Enter your choice: 1
58. Enter an employee ID number: 456
59. Name: Barb Dwyer
60. ID number: 456
61. Department: Manufacturing
62. Title: Engineer
63. Menu
64. ----------------------------------------
65. 1. Look up an employee
66. 2. Add a new employee
67. 3. Change an existing employee
68. 4. Delete an employee
69. 5. Quit the program
70. Enter your choice: 4
71. Enter employee ID number: 123
72. Employee information deleted.
73. Menu
74. ----------------------------------------
75. 1. Look up an employee
76. 2. Add a new employee
77. 3. Change an existing employee
78. 4. Delete an employee
79. 5. Quit the program
80. Enter your choice: 1
81. Enter an employee ID number: 123
82. The specified ID number was not found
83. Menu
84. ----------------------------------------
85. 1. Look up an employee
86. 2. Add a new employee
87. 3. Change an existing employee
88. 4. Delete an employee
89. 5. Quit the program
90. Enter your choice: 3
91. Enter employee ID number: 789
92. Enter the new name: Lon Moore
93. Enter the new department: IT
94. Enter the new title: Software Engineer
95. Employee information updated.
96. Menu
97. ----------------------------------------
98. 1. Look up an employee
99. 2. Add a new employee
100. 3. Change an existing employee
101. 4. Delete an employee
102. 5. Quit the program
103. Enter your choice: 5

**Submitting Your Assignment**

Once you have completed your program, submit your files (Employee.py, L8q1.py) electronically.

You may resubmit your files as many times as you need until the due date. Only the most recent submission is graded. You are required to include the following lines in the header of all your files:

|  |
| --- |
| **# File: filename.py # Author: Student name # Date: xx/xx/2021 # Section: Student section number  # E-mail: student\_email@tamu.edu  # Description: # e.g. This program asks for ...** |

Submit your files on [gradescope.com](https://www.gradescope.com/)