Database of internships for freshmen and preparations:

- Table 1(dictionary 1):
    - Holds records of internship programs
    - Columns include: The length if the internship(str), the salary(**int**), if the user has applied(**str**), a link to the website(**str**), and the deadline(**str**).
    - To do this I made a nested dictionary where the unique id is the row and the columns are the values of the unique id.
- Table 2(dictionary 2):
    - Holds records of leetcode problems I have completed.
    - Columns include: The problem number(**int**), if I have solved the question(**str**), the solution(**str**), the time complexity(**str**), and an explanation of the problem(**str)**.
    - To do this I made a nested dictionary where the unique id is the row and the columns are the values of the unique id.

Menu commands:
The menu commands interact with the dictionaries/tables/databases as methods. I created a class called menu commands and then two objects for that class table1 and table2 so I could use the methods for said methods

- **Add record or ar**
    - This allows users to not only add records and values to the database but to go a step further and add the columns. What that means is if the user wishes to enter a new name for a column they can
        - One thing with the add is that because it is not specified the value the data type might not be as expected. So if you enter anything to add it will be a string
        - Syntax: `def add(self, database):`

```
        row_name = input('What is the name of the new record you want to add: ')
        column_one = input('what is the column you want to add: ')
        column_one_val = input('what info will go in this column: ')
        column_two = input('what is the column you want to add: ')
        column_two_val = input('what info will go in this column: ')
        column_three = input('what is the column you want to add: ')
        column_three_val = input('what info will go in this column: ')
```

```
        column_four = input('what is the column you want
to add: ')
        column_four_val = input('what info will go in
this column: ')
        column_five = input('what is the column you want
to add: ')
        column_five_val = input('what info will go in
this column: ')
        self.database[row_name] = {
            column_one : column_one_val,
            column_two : column_two_val,
            column_three : column_three_val,
            column_four : column_four_val,
            column_five : column_five_val
        }
        print(f'{row_name} Record Added')
```

- Ex:

Add record or ar
Remove record or rr
Print all or pa
Print specific or ps
Update record or ur
Use quit or q to exit the database

Choose one of the options: ar

1 - Internships
2 - leetcodes

Which table do you want to add to: YETI
You have entered an incorrect value please try again.
Which table do you want to add to: 1
What is the name of the new record you want to add: Yeti
what is the column you want to add: Length
what info will go in this column: 12 weeks
what is the column you want to add: salary
what info will go in this column: 33.50
what is the column you want to add: Applied
what info will go in this column: no
what is the column you want to add: Website

what info will go in this column:
https://www.glassdoor.com/Salary/YETI-Software-Engineer-Salaries-E417680_D_KO5,22.htm
what is the column you want to add: Deadline
what info will go in this column: Rolling
Yeti Record Added

Add record or ar
Remove record or rr
Print all or pa
Print specific or ps
Update record or ur
Use quit or q to exit the database

Choose one of the options: print all

1 - Internships
2 - leetcodes

Which table do you want to print from: 1
Google STEP : {'Length': '12 weeks', 'Salary': 37.98, 'Applied': 'Yes', 'Website': 'https://buildyourfuture.withgoogle.com/programs/step', 'Deadline': 'Rolling'}
Microsoft Explore : {'Length': '12 weeks', 'Salary': 34.0, 'Applied': 'Yes', 'Website': 'https://careers.microsoft.com/v2/global/en/exploremicrosoft', 'Deadline': 'Rolling'}
Yeti : {'Length': '12 weeks', 'salary': '33.50', 'Applied': 'no', 'Website': 'https://www.glassdoor.com/Salary/YETI-Software-Engineer-Salaries-E417680_D_KO5,22.htm', 'Deadline': 'Rolling'}

- **Remove record or RR**:
  - This allows the user to remove a record from the database.
    - Syntax: `def remove(self, database, record_name):`

```
        if record_name in self.database:
            self.database.pop(record_name)
            if record_name not in self.database:
                print(f'{record_name} deleted')
```

    - Example:
      Add record or ar
      Remove record or rr
      Print all or pa
      Print specific or ps

Update record or ur
Use quit or q to exit the database

Choose one of the options: rr

1 - Internships
2 - leetcodes

Which table do you want to remove from: 1
Which record do you want to delete(case sensetive): Amazon Propel
Amazon Propel deleted

Add record or ar
Remove record or rr
Print all or pa
Print specific or ps
Update record or ur
Use quit or q to exit the database

Choose one of the options: print all

1 - Internships
2 - leetcodes

Which table do you want to print from: 1
Google STEP : {'Length': '12 weeks', 'Salary': 37.98, 'Applied': 'Yes', 'Website': 'https://buildyourfuture.withgoogle.com/programs/step', 'Deadline': 'Rolling'}
Microsoft Explore : {'Length': '12 weeks', 'Salary': 34.0, 'Applied': 'Yes', 'Website': 'https://careers.microsoft.com/v2/global/en/exploremicrosoft', 'Deadline': 'Rolling'}

- **Print All or PA:**
  - The print all prints the database specified by the user.
    - Syntax:
```
def display_all(self, database):
        for key, val in self.database.items():
            print(f'{key} : {val}')
```
    - Example:
      Add record or ar
      Remove record or rr
      Print all or pa
      Print specific or ps
      Update record or ur

Use quit or q to exit the database

Choose one of the options: print all

1 - Internships
2 - leetcodes

Which table do you want to print from: 1
Google STEP : {'Length': '12 weeks', 'Salary': 37.98, 'Applied': 'Yes', 'Website': 'https://buildyourfuture.withgoogle.com/programs/step', 'Deadline': 'Rolling'}
Microsoft Explore : {'Length': '12 weeks', 'Salary': 34.0, 'Applied': 'Yes', 'Website': 'https://careers.microsoft.com/v2/global/en/exploremicrosoft', 'Deadline': 'Rolling'}
Amazon Propel : {'Length': '12 weeks', 'Salary': 44.0, 'Applied': 'Yes', 'Website': 'https://www.amazon.jobs/en/jobs/2408098/software-development-engineer-internship-2024-us', 'Deadline': 'Rolling'}

- **Print Specific or PS:**
  - Print specific allows the user to print specific values from a specified record
    - Syntax:
```
def display_specific(self, database, record_name):
        print(self.database.get(record_name))
```
    - Example:
      Add record or ar
      Remove record or rr
      Print all or pa
      Print specific or ps
      Update record or ur
      Use quit or q to exit the database

      Choose one of the options: print specific

      1 - Internships
      2 - leetcodes

      Which table do you want to print from: 2
      Which record from Leetcode do you want to retreive(please be specific with the name of the record): two sum
      {'Problem number': 1, 'Solved': 'Yes', 'Datatype used': 'Hashmap', 'Time Complexity': 'O(N)', 'Explanation': 'You initialize a dictionary, and iteratate

through the list of nums looking for the differences in dictionary as it goes throught the interations.'}

- **Update Record or UR:**
  - Update record allows the user to update a specified value in a record
    - Syntax: `def update_rec(self, database, record_name, column_name, update):`
    - `self.database[record_name][column_name] = update`
    - example:
      Add record or ar
      Remove record or rr
      Print all or pa
      Print specific or ps
      Update record or ur
      Use quit or q to exit the database

      Choose one of the options: ur

      1 - Internships
      2 - leetcodes

      Which table do you want to update: 2
      What record would you like to update in Leetcode: two sum
      What is the name of the column you want to update: Time Complexity
      What is the new info for this column: o(1)
      updated to: o(1)

- **Quit or Q:**
  - Allows the user to exit the while loop and thus the program
    - Syntax: `while (user_option != 'quit') and (user_option != 'q' ):`
    - Example:

Add record or ar
Remove record or rr
Print all or pa
Print specific or ps
Update record or ur
Use quit or q to exit the database

Choose one of the options: quit
PS C:\Users\cypra\Downloads\CSC1301>