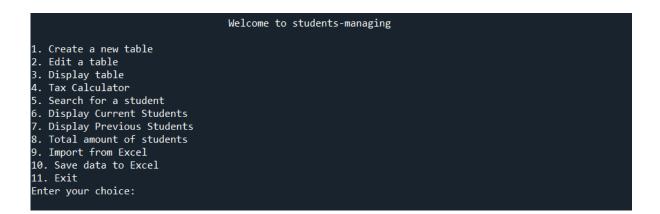# Managing students

In the project I created a managing students system in Python.

The system helps tutors and teachers who want to save data about their students, lessons, pay and tax.

This project leverages Object-Oriented Programming (OOP) principles along with the powerful data manipulation capabilities of pandas, a Python Data Analysis Library, to efficiently manage and process data, including data stored in Excel files.

```
                    Welcome to students-managing

1. Create a new table
2. Edit a table
3. Display table
4. Tax Calculator
5. Search for a student
6. Display Current Students
7. Display Previous Students
8. Total amount of students
9. Import from Excel
10. Save data to Excel
11. Exit
Enter your choice:
```

In the main screen we can see we have a few options-

1. Creating a new table

2. Editing a table

3. Displaying a table

4. Tac calculator

5. Searching a student

6. Display Current Students

7. Display Previous Students

8. Total amount of students

9. Import from Excel

10. Save data to Excel

 Creating a new table

```
                      Creating a new table

Enter the name for the new table: 2024
```

In this section, we'll be prompted to assign a name to the table, with the option to modify it later.

Editing a table

```
                         Editing tables

Enter the name of the table you want to switch to: 2024

Current Table:
Empty DataFrame
Columns: [First name, Last name, Phone number, School, Hours, Current Student?]
Index: []

Options for Table '2024':
1. Switch to another table
2. Display current table
3. Add a new student
4. Delete a student
5. Update a student
6. Back to main menu
Enter your choice: |
```

In this section we'll be asked to choose a table and then will be given the option to-

1.Switch to another table

2. Display current table

3. Add a new student

4. Delete a student

5. Update a student

This tool serves as a valuable resource for teachers seeking a user-friendly interface to view, add, and edit data effortlessly.

Tax calculator

```
                        Tax calculator

Enter the name of the table to calculate total hours: 2024
Enter the price per hour: 20
1. Calculate total pay
2. Calculate the amount of tax to pay
3. Display tax brackets
4. Back to main menu
Enter your choice: 2

Income tax for an income of $300.0 is $30.0
```

We'll be given the option to-

1. Calculate total pay

2. Calculate the amount of tax to pay

3. Seeing tax brackets

In this tool serves as a resource for teachers who want to know how much they earned and how much tax they need to pay.

Searching a studen

```
                        Searching students

Enter the name of the student to search: Jane

Student 'Jane' found in Table '2024':
  First name Last name Phone number School Hours Current Student?
0      Jane      Doe       123456    MIT    15            yes
```

Teachers can easily search for a specific student to access and review their relevant data.

Display Current Students

```
                        Current students


Table '2024':
  First name Last name Phone number School Hours Current Student?
0      Jane      Doe       123456     MIT    15            yes
```

In this section, the teacher can see all their current students.

Display Previous Students

```
                        Previous students

Table '2024':
   First name Last name Phone number   School Hours Current Student?
1       Mike      Davis        52548  harvard    22               no
```

In this section, the teacher can see all their previous students.

Import from Excel

If the teacher has data stored in an Excel file, they can seamlessly import it into the system, which will automatically generate a corresponding table.

Save data to Excel

This feature enables teachers to export data from the system to an Excel file effortlessly.