

Title: Attendance Project

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Course: Introduction to Problem Solving and Programming

1. Introduction

I made a small Python program for marking attendance.

The program runs in the terminal.

It helped me understand basic Python like input, loops and storing data.

The aim was to make a simple working project using what I learnt.

2. Objective

The main objectives of my project were:

- to add students and mark them present or absent
- to show all the attendance
- to show a small summary of total, present and absent

I wanted to make something easy to understand and simple to use.

3. Tools Used

I used **Python** only.

No extra libraries were needed.

4. Working of the Program

The program shows a menu with 4 options.

The user can select:

1. Add attendance
2. Show all attendance
3. Attendance summary
4. Quit

I used a dictionary in Python to store the student names and their status.

For present I stored “present”, and for absent I stored “absent”.

The summary is calculated using simple counting.

5. Code Explanation (Short)

- `records = { }` is used to store the data
- `take_attendance()` takes the name and p/a
- `show_records()` prints the list
- `analyse_records()` prints total, present, absent and percentage
- `menu()` keeps the program running until user quits

The code is simple and uses only loops, if-else and a dictionary.

6. Screenshots

```
== MENU ==
```

1. Add attendance
2. Show all attendance
3. Attendance summary
4. Quit

```
Choose between 1-4: 1
```

```
== MARK ATTENDANCE ==
```

```
Student name (type STOP to go back): Simran
```

```
Present or Absent? (p/a): p
```

```
== MARK ATTENDANCE ==
```

```
Student name (type STOP to go back): Prince
```

```
Present or Absent? (p/a): p
```

```
== MARK ATTENDANCE ==
```

```
Student name (type STOP to go back): Krish
```

```
Present or Absent? (p/a): a
```

```
== MARK ATTENDANCE ==
```

```
Student name (type STOP to go back): STOP
```

```
Choose between 1-4: 3
```

```
== SUMMARY ==
```

```
Total students : 3
```

```
Present        : 2
```

```
Absent         : 1
```

```
Attendance %   : 66.67
```

```
Choose between 1-4: 2
```

```
== ATTENDANCE LIST ==
```

```
simran --> present
```

```
prince --> present
```

```
krish --> absent
```

7. Conclusion

By making this project I understood how to take user input, store it, and show it again.

I also learned how to use dictionaries in Python.

The project is small, but it helped me practice basic programming.

8. References

None.

I wrote the code on my own.