

Data Science In Tamil – Batch 2

Basic Assignment No. 2

- Everyone must do the project on his / her own
- Don't post the project the telegram group
- Post your Code & Output Screen shot in Classroom under Assignment
- Volunteers are expected from telegram group to manage
- All your source code will be freely used by other DSIT members

Assignment Name : Seminar Entry Pass System

Let us assume that DSIT is conducting a technical Seminar/Conference in Chennai related to Data Science. DSIT decided to allow 100 (For Testing purpose you may fix as 5) members to participate.

As a Python developer, we are assigned to develop a simple program to collect details of participants who are entering the entrance gate and show a entry pass. When Allowed no of participant reaches, system will the the message "HOUSEFUL". We have to give Participant list whenever required. Also Category wise Summary is required to the DSIT officials.

Participant Categories

1. Students
2. Employees
3. Un-Employees

What are the things you need to learn.

1. Assignment Operator
2. Input Statement
3. Print Statement
4. while loop
5. If condition
6. function
7. List
8. Dictionery

Keep below in mind before start.

1. Use variable name as meaningful
2. Use comment line whenever required.
3. Use proper indentation.
4. Input & Output messages as neat.

Step by Step Process Flow.

1. Initialize variable for Allowed participants in the seminar.
2. Initialize variable for Pass number. (Pass number & Count will be same)
3. Initialize required Variables for No.of Student,Employee & Un-Employee

Screen No. 1

Clear Screen and display a Menu with 4 options

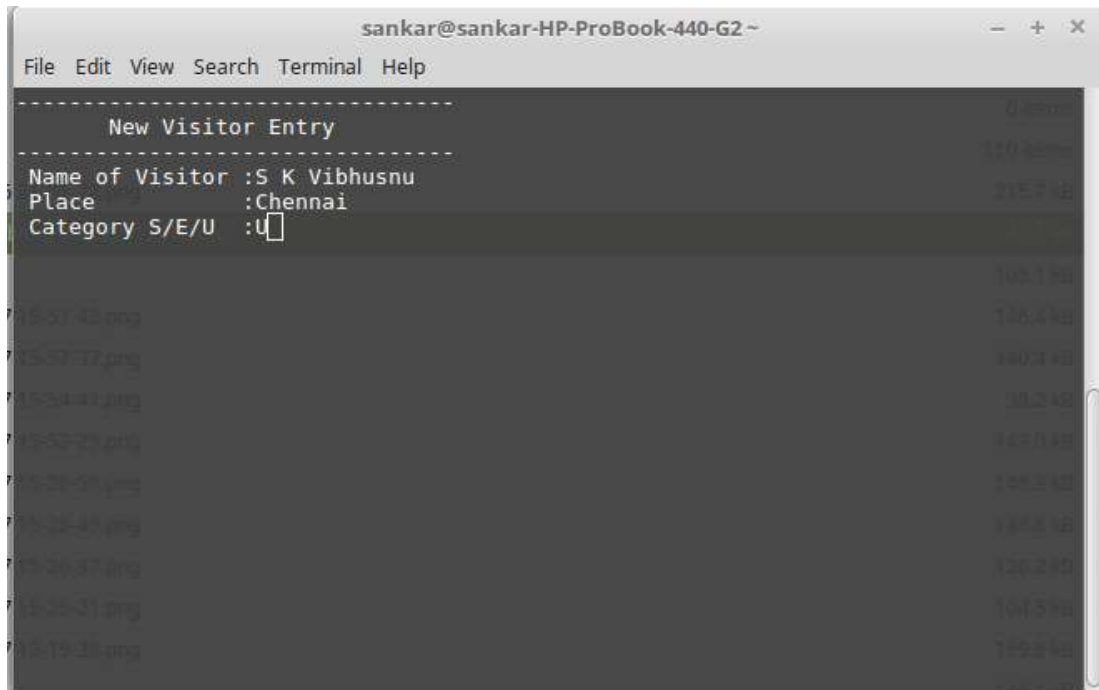
1. Visitor Entry
2. Visitor List
3. Summary
0. Exit

```
sankar@sankar-HP-ProBook-440-G2 ~
File Edit View Search Terminal Help
DATA SCIENCE SEMINAR
-----
MENU
-----
1. New Visitor
2. Visitor List
3. Categorywise Summary
0. Exit
-----
Enter your Code 0-3 : 
```

Screen No. 2

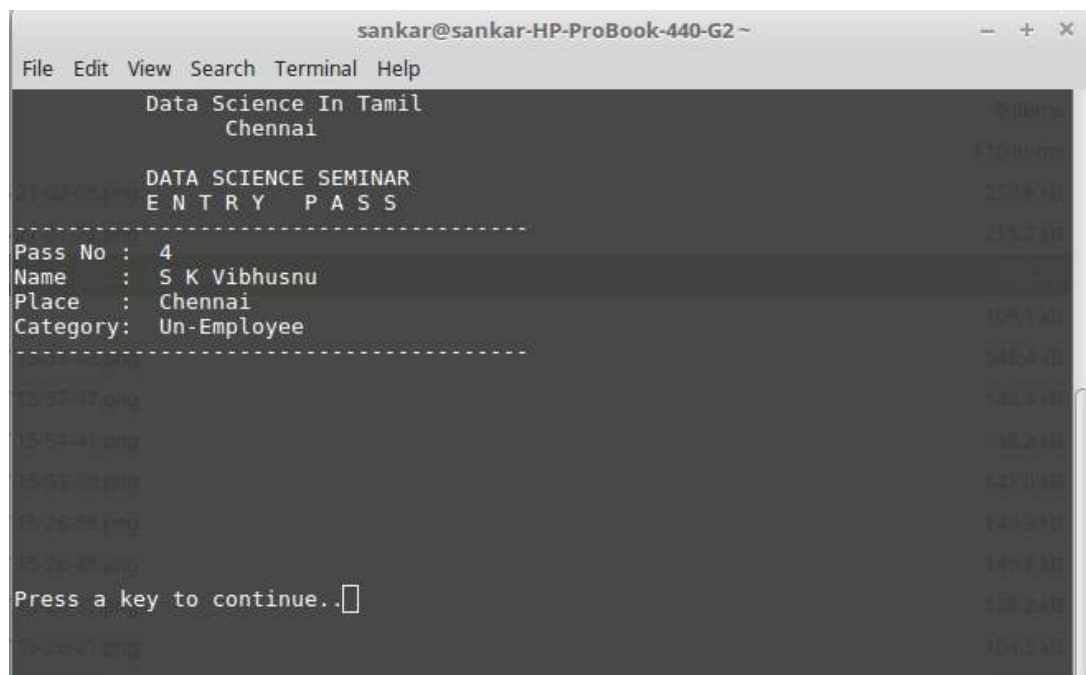
If option is 1, system has to display entry screen to get Name of participant, Place and Category.

Category Input should be S / E / U



Screen No. 3

After entering details of participant, system will show an entry pass like below



After pressing a key, system will show the menu again. (**Screen No. 1**)

Screen 4.

If option is 2, system has to display a report contains participant details like below screen

```
sankar@sankar-HP-ProBook-440-G2 ~
File Edit View Search Terminal Help
DATA SCIENCE SEMINAR
-----
Participant List
-----
Sl.No. Name of Participant Place Category
-----
1 M A Sankar Nagercoil Employee
2 Loganathan Chennai Employee
3 S K Nivisha Chennai Student
4 S K Vibhusnu Chennai Un-Employee
-----
press any key to continue..
```

After pressing a key, system will show the menu again. (**Screen No. 1**)

Screen 5.

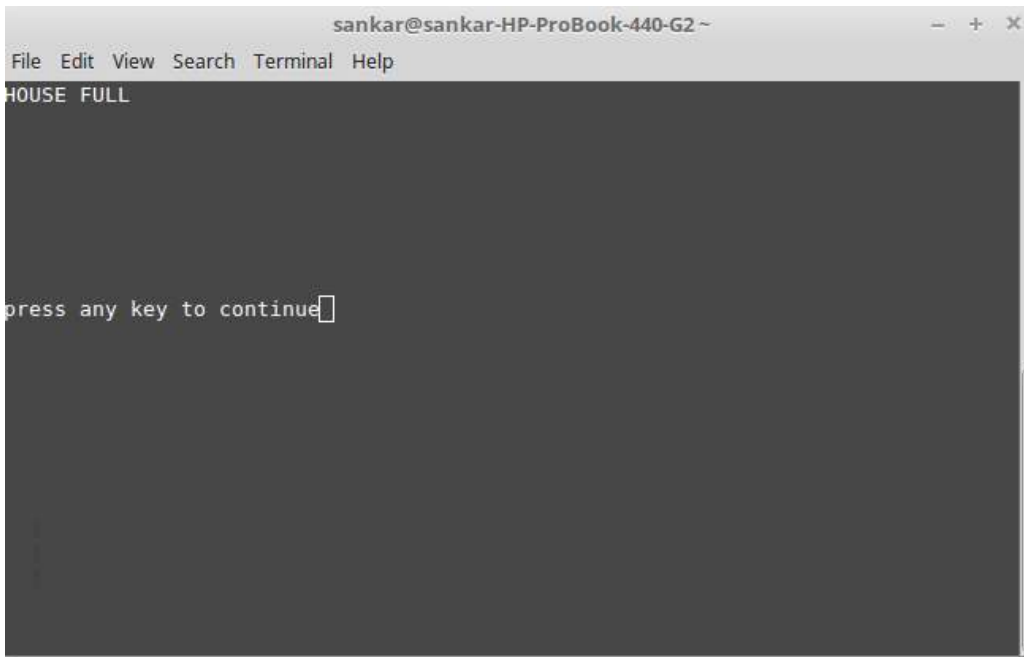
If option is 3, system has to display a summary report contains participant count like below screen

```
sankar@sankar-HP-ProBook-440-G2 ~
File Edit View Search Terminal Help
Data Science In Tamil
Chennai
DATA SCIENCE SEMINAR
Summary
-----
No of Participants : 4
No of Students : 1
No of Employees : 2
No of Un-Employee : 1
-----
Press a key to continue..
```

After pressing a key, system will show the menu again. (**Screen No. 1**)

Screen 5.

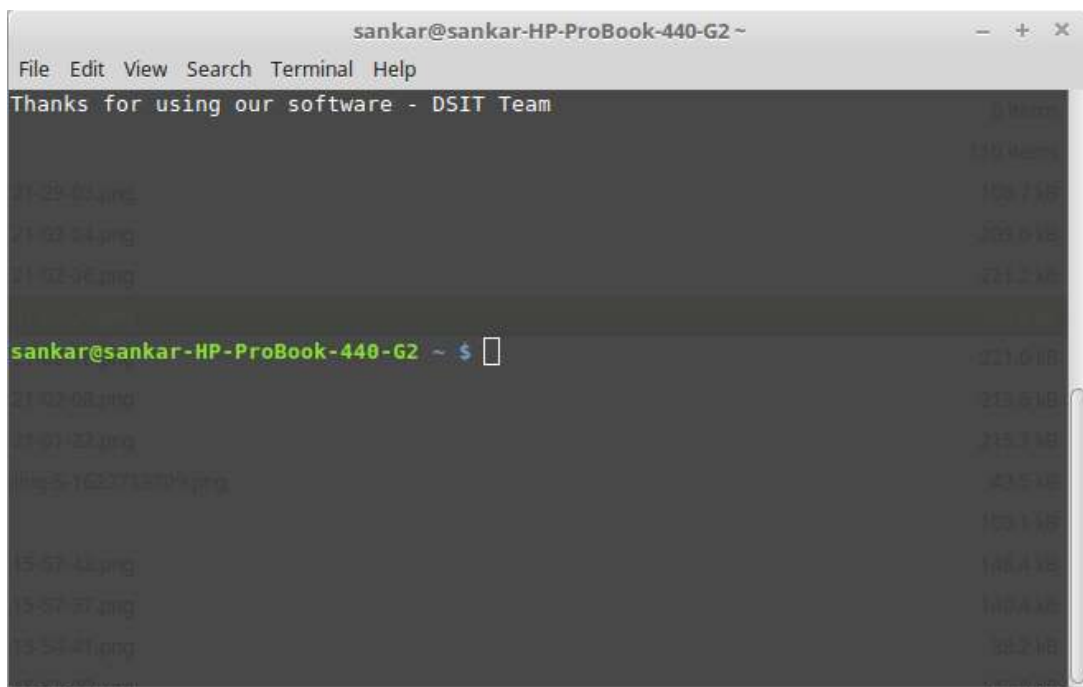
If option is 1, system will check whether maximum participant count reaches or not. If reached, it will display a HOUSE FULL message like below screen



After pressing a key, system will show the menu again. (**Screen No. 1**)

Screen 6.

If option is 0, system will exit from menu loop and display the below screen



New methods used.

1. Clear Screen

os.systems('clear')

You need to import library os in the beginning of program like

import os

2. String methods used.

1. **String.ljust**

2. **String.rjust**

3. **String.center**

Note : Please do the assignment as in Document.

Let us expand the functionality after studying more commands & methods in Python.