

Develop an application for "**Hospital O.P.D Management Services**". The application should have the following functionalities..

1. When the patient arrives at the clinic,
 - a. Check the patient details with the hospitals record and if the patient detail is available , continue from step 2.
 - b. If not, create an entry for them in the hospital records.
2. Before meeting the doctor, patients interact with two medical professionals present in this hospital to log their complaints. Both medical professionals barely spent 5 minutes with each patient.
3. After that patient will be allowed to meet the doctor who spent almost 20 min for treatment (it varies randomly based on the health condition between 2 min to 20 min but by default 2 min of time is considered by the receptionist) & then the pharmacy took exactly 5 min to give the medicines from the hospital before all these processes.
4. Since it's a reputed hospital in the locality, they used to show their gratitude by saying sorry for making the patient wait for some amount of time for each process in the hospital and then mark the patient's OUT Time whenever the patient leaves the hospitals.
5. At any time, the software should display the total number of out patient records in the hospital and the total number of out patients currently in a queue to get treated further.

Sample Data:

for eg: Consider three patients arrived at the hospitals in the below timings.

Patient Id	Patient Name	In Time
100	AAA	3.00 PM
101	BBB	3.05 PM
102	CCC	3.06 PM

Sample Output:

Patient Id	Time taken by the doctor (varies Randomly)	Out time	Total Waiting Time
100	10 min	3.25 PM	0
101	4 min	3.30 PM	6 min
102	8 min	3.32 PM	8 min