

## 5.Results

### Output

```
==== Hospital Management System ====
1. Add Patient
2. List Patients
3. Discharge Patient
4. Show Doctors
0. Exit
Enter your choice: 1
Enter Patient Name: Harshitha
Enter Age: 22
Enter Gender: Female
Enter Date of Birth (dd-mm-yyyy): 22/06/2004
Enter Address: Bengaluru
Enter Disease: Fever

Patient Registered Successfully!

Suggested Doctor based on disease "Fever":
-> Dr. Nisha Rao (General Physician)
```

```
==== Hospital Management System ====
1. Add Patient
2. List Patients
3. Discharge Patient
4. Show Doctors
0. Exit
Enter your choice: 1
Enter Patient Name: Vidya
Enter Age: 24
Enter Gender: Female
Enter Date of Birth (dd-mm-yyyy): 06/05/2002
Enter Address: Belagavi
Enter Disease: bone

Patient Registered Successfully!

Suggested Doctor based on disease "bone":
-> Dr. Amit Khurana (Orthopedic)
```

```
==== Hospital Management System ====
1. Add Patient
2. List Patients
3. Discharge Patient
4. Show Doctors
0. Exit
Enter your choice: 2
```

ID	Name	Age	Gender	DOB	Address	Disease
1	Harshitha	22	Female	22/06/2004	Bengaluru	Fever
2	Vidya	24	Female	06/05/2002	Belagavi	bone

```
==== Hospital Management System ====
1. Add Patient
2. List Patients
3. Discharge Patient
4. Show Doctors
0. Exit
Enter your choice: 3
Enter Patient ID to discharge: 2
Patient ID 2 discharged successfully.
```

```
==== Hospital Management System ====
1. Add Patient
2. List Patients
3. Discharge Patient
4. Show Doctors
0. Exit
Enter your choice: 4
```

ID	Name	Specialization
101	Dr. Meena Sharma	Cardiologist
102	Dr. Rajeev Menon	Neurologist
103	Dr. Nisha Rao	General Physician
104	Dr. Amit Khurana	Orthopedic
105	Dr. Priya Singh	Dermatologist
106	Dr. Nandini Iyer	Ophthalmologist

- Patients can be added dynamically.
- Doctor suggestion works accurately based on keywords (e.g., "heart" → Cardiologist).
- Patients can be discharged using their unique ID.
- Displays a formatted list of all patients and doctors.

## **7. Conclusion**

The Hospital Management System project demonstrates the practical use of structures, arrays, and functions in C. It efficiently models a small-scale patient management system and lays a solid foundation for more complex systems involving data persistence, validation, and security. It is an excellent learning project for C learners focusing on real-world problem solving.