```
Choose: 1
---- Register New Patient ----
ID: P008
Name: Amy Garcia
Age: 18
Severity (1-10): 1
Registered: Patient{id='P008', name='Amy Garcia', age=18, severity=1, arrivalSeq=7}
```

```
Choose: 2
---- Update Patient ----
ID: P006
New name (blank = no change): Jane Doe
New age (blank = no change): 75
New severity (blank = no change): 7
Patient updated.
```

```
Choose: 3
Enter patient ID to enqueue: P008
Added to queue.
```

```
----------------------------------
Choose: 4
Next: Patient{id='P005', name='Emily Marx', age=21, severity=10, arrivalSeq=4}
```

```
Choose: 5
Treating: Patient{id='P003', name='Emily Marx', age=21, severity=10, arrivalSeq=2}
Outcome: 1) STABLE  2) OBSERVE  3) TRANSFER
Choose: 1
Notes: Tumor removal successful, will have to stay in hospital for 4-6 weeks for observation
Treatment logged.
```

```
Choose: 6
---- Triage Order ----
Patient{id='P003', name='Emily Marx', age=21, severity=10, arrivalSeq=2}
Patient{id='P004', name='Tom Taylor', age=13, severity=6, arrivalSeq=3}
Patient{id='P001', name='ana Ruiz', age=37, severity=4, arrivalSeq=0}
Patient{id='P002', name='Marco Martinez', age=39, severity=3, arrivalSeq=1}
```

```
Choose: 7
ID: P004
Patient{id='P004', name='Tom Taylor', age=13, severity=6, arrivalSeq=3}
```

```
Choose: 8
1) Oldest → Newest
2) Newest → Oldest
Choose: 2
---- Treatment Log ----
TreatedCase{patient=P002, start=2025-12-04T13:37:28.131625Z, end=2025-12-04T13:37:28.131630Z,
TreatedCase{patient=P001, start=2025-12-04T13:37:05.091827Z, end=2025-12-04T13:37:05.091841Z,
TreatedCase{patient=P004, start=2025-12-04T13:36:11.462307Z, end=2025-12-04T13:36:11.462317Z,
TreatedCase{patient=P003, start=2025-12-04T13:35:17.035794Z, end=2025-12-04T13:35:17.035804Z,
```

```
Choose: 9
---- Performance Demo ----
How many patients to enqueue? 4
How many dequeues? 4
Enqueue N: 2.096 ms
Dequeue K: 0.012 ms
```

id	name	age	severity	treatedAt
1 P003	Emily Marx	21	10	2025-12-04T13:35:17.035804Z
2 P004	Tom Taylor	13	6	2025-12-04T13:36:11.462317Z
3 P001	ana Ruiz	37	4	2025-12-04T13:37:05.091841Z
4 P002	Marco Martinez	39	3	2025-12-04T13:37:28.131630Z
5 P001	ana Ruiz	37	4	2025-12-04T13:45:32.209386Z
6 P004	Tom Taylor	13	6	2025-12-04T13:46:45.234052Z
7 P003	Emily Marx	21	10	2025-12-04T13:47:58.728672Z