

```
import heapq # for priority queue
```

```
class Patient:
```

```
    def __init__(self, name, priority):
```

```
        self.name = name
```

```
        self.priority = priority # 1 = Critical, 2 = Serious, 3 = Minor
```

```
    def __lt__(self, other):
```

```
        return self.priority < other.priority # compare by priority
```

```
# Step 1: Initialize an empty priority queue
```

```
priority_queue = []
```

```
# Step 2: Enqueue patients with their priorities
```

```
heapq.heappush(priority_queue, Patient("Heart Attack", 1))
```

```
heapq.heappush(priority_queue, Patient("Fractured Arm", 2))
```

```
heapq.heappush(priority_queue, Patient("Headache", 3))
```

```
# Step 3: Treat patients in order of priority
```

```
print("Treatment Order at CHUK Emergency:")
```

```
while priority_queue:
```

```
    patient = heapq.heappop(priority_queue)
```

```
    print(f'Treating patient with: {patient.name} (Priority {patient.priority})')
```