

Stack and Queue

Major: Mathematics(수학과)

Student ID: 202021224

Name: 주민찬

<Stack>

```
Scanning integers has stopped, the stack is full, I will pop out the phone number from the stack.
phoneNumber1: 01075382217
The Stack is now empty, continue scanning.
Scanning integers has stopped, the stack is full, I will pop out the phone number from the stack.
phoneNumber2: 01023456987
The Stack is now empty, continue scanning.
Scanning integers has stopped, the stack is full, I will pop out the phone number from the stack.
phoneNumber3: 01046538987
Scanning is completed.
The list of phone numbers from the input string is.
01075382217
01023456987
01046538987
```

<Queue>

```
Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
4
You entered the wrong number.
Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
1
The current waiting number is 0. Please select the number of the function you want from the following.
1. Waiting registration 2. Cancellation
1
Please register the name of the waiting person: first
Thank you

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
1
The current waiting number is 1. Please select the number of the function you want from the following.
1. Waiting registration 2. Cancellation
1
Please register the name of the waiting person: second
Thank you

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
1
The current waiting number is 2. Please select the number of the function you want from the following.
1. Waiting registration 2. Cancellation
1
Please register the name of the waiting person: third
Thank you

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
2
patient: first

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
2
patient: second
```

```
Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
1
The current waiting number is 1. Please select the number of the function you want from the following.
1. Waiting registration 2. Cancellation
1
Please register the name of the waiting person: fourth
Thank you

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
1
The current waiting number is 2. Please select the number of the function you want from the following.
1. Waiting registration 2. Cancellation
1
Please register the name of the waiting person: fifth
Thank you

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
1
The current waiting number is 3. Please select the number of the function you want from the following.
1. Waiting registration 2. Cancellation
1
Please register the name of the waiting person: sixth
Thank you

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
2
patient: third

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
1
The current waiting number is 3. Please select the number of the function you want from the following.
1. Waiting registration 2. Cancellation
1
Please register the name of the waiting person: seventh
Thank you

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
1
The current waiting number is 4. Please select the number of the function you want from the following.
1. Waiting registration 2. Cancellation
1
Please register the name of the waiting person: eighth
Thank you

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
1
There is no space for new medical treatments, try again next time.

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
2
patient: fourth

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
2
patient: fifth

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation
1
The current waiting number is 3. Please select the number of the function you want from the following.
1. Waiting registration 2. Cancellation
4
You entered the wrong number.
The current waiting number is 3. Please select the number of the function you want from the following.
1. Waiting registration 2. Cancellation
2
Cancellation of the hospital arrival
```

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation

2

patient: sixth

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation

2

patient: seventh

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation

2

patient: eighth

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation

2

No patient waiting

Welcome to the Hospital care service. Please select the number of the function you want.
1. Hospital Arrival 2. Proceed treatment 3. Service Cancellation

3

Terminate the program