

# 模拟栈和队列

## 测试数据

c`o`m`p`u`t`e`r

## 测试结果

```
Hello! Welcome to use Stack & Queue simulator.
-----
Please choose the data structure you want
| 1 - stack | 2 - queue | 0 - quit |
1
-----
Please choose the method you want to perform
| 1 - push an element | 2 - pop an element | 3 - top of the stack |
| 4 - size of the stack | 5 - is the stack empty | 6 - print the stack |
| 0 - quit |
1
-----
Please enter the character you want to push
c
push success!
1
Please enter the character you want to push
o
push success!
1
Please enter the character you want to push
m
push success!
1
Please enter the character you want to push
p
push success!
1
Please enter the character you want to push
t
push success!
1
Please enter the character you want to push
e
push success!
1
Please enter the character you want to push
r
push success!
6
c o m p t e r
2
pop success!
6
c o m p t e
2
pop success!
6
c o m p t
2
pop success!
6
c o m p
2
pop success!
6
c o m
```

```

2
pop success!

6
c o

2
pop success!

6
c

2
pop success!

6
This stack is empty!

0

```

```

2
-----
Please choose the method you want to perform
| 1 - push an element | 2 - pop an element | 3 - top of the queue |
| 4 - back of the queue | 5 - size of the queue | 6 - is the queue empty ||
7 - print the queue | 0 - quit |
-----
1
Please enter the character you want to push
c
push success!

2
pop success

6
The queue is empty

1
Please enter the character you want to push
c
push success!

1
Please enter the character you want to push
o
push success!

1
Please enter the character you want to push
p
push success!

1
Please enter the character you want to push
t
push success!

```

```

1
Please enter the character you want to push
a
push success!

1
Please enter the character you want to push
r
push success!

7
c o p t e r

2
pop success

7
o p t e r

2
pop success

7
p t e r

2
pop success

7
t e r

2
pop success

7
e r

```

```
2
pop success

7
r

2
pop success

7
This queue is empty!

0
```