

# Yiping Liang B00744822 Assignment1

## Ex(1)

```
<terminated> lattice [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_111.jdk/Contents/Home/bin/java (Oct 3, 2017, 11:33:29 PM)
Enter the lattice size:1
Path is [NE, EN]
Execution time: 1ms

<terminated> lattice [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_111.jdk/Contents/Home/bin/java (Oct 3, 2017, 11:33:29 PM)
Enter the lattice size:2
Path is [NNEE, NENE, NEEN, ENNE, ENEN, EENN]
Execution time: 3ms
```

```
<terminated> lattice [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_111.jdk/Contents/Home/bin/java (Oct 3, 2017, 11:33:29 PM)
Enter the lattice size:3
Path is [NNNEEE, NNNEEE, NNEENE, NNEEEN, NENNEE, NENENE, NENEEN, NEENNE, NEENEN, NEEENN, ENNNEE, ENNENE, ENNEEN, ENENNE, ENENEN, ENEENN, EENNNE, EENNEN,
Execution time: 24ms
```

EENENN, EEENNN]

## Ex(2)

```
<terminated> latticePath [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_111.jdk/Contents/Home/bin/java (Oct 3, 2017, 11:33:29 PM)
Enter the lattice size:
1
[NE,EN,D]
Execution time: 0ms

<terminated> latticePath [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_111.jdk/Contents/Home/bin/java (Oct 3, 2017, 11:33:29 PM)
Enter the lattice size:
2
[NNNEE, NENE, NEEN, ENNE, ENEN, EENN, NDE, DD, EDN]
Execution time: 0ms
```

```
<terminated> latticePath [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_111.jdk/Contents/Home/bin/java (Oct 3, 2017, 11:33:29 PM)
Enter the lattice size:
3
[NNNEEE, NNNEEE, NNEENE, NNEEEN, NENNEE, NENENE, NENEEN, NEENNE, NEENEN, NEEENN, ENNNEE, ENNENE, ENNEEN, ENENNE, ENENEN, ENEENN, EENNNE, EENNEN,
Execution time: 1ms
```

EEENNN, NNDEE, NDDE, NDED, DNDE, DDD, DEDN, EDND, EDDN, EEDNN]

## Ex2(1)

## Yiping Liang B00744822 Assignment1

```
<terminated> stringDemo [Java Application] /Library/Java/JavaVirtualMachir
Please enter String: mississippi
Please enter SubString:ssi
Substringssi was found in mississippi 2 times
```

```
<terminated> stringDemo [Java Application] /Library/Java/JavaVirtualMa
Please enter String:mississippi
Please enter SubString:p
Substringp was found inmississippi 2 times
```

```
<terminated> stringDemo [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.
Please enter String:wonder
Please enter SubString:wonderful
No matches - substring wonderful was not found in wonder
```

```
<terminated> stringDemo [Java Application] /Library/Java/JavaVirtualMachines
Please enter String:mississippi
Please enter SubString:M
No matches - substring M was not found in mississippi
```

```
<terminated> stringDemo [Java Application] /Library/Java/JavaVirtualMachines/jdk1
Please enter String:abcdeeedddee
Please enter SubString:dee
Substringdee was found inabcdeeedddee 2 times
```

Ex(2)

	A	B	C	D	
1	substring	number of m	Time taken(ms)		
2	CC	1458	20		
3	AGT	291	21		
4	AA	1298	22		
5	GT	1083	23		
6	A	4833	22		
7	GGG	421	23		
8	ABCD	0	22		
9					
10					
11					