

## Output:

### QN 1:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter a binary string 011011
The string 011011 is accpeted
```

### QN 2:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter a binary string (only 0s and 1s): 0010
Accepted
```

### QN 3:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter a string: aaabbb
Accepted
```

### QN 4:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter a string: aababab
String is accepted.
```

### QN 5:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter a string: aaabba
String is not accepted.
```

### QN 6:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter a string: abaababa
String is accepted.
```

Output:

QN 7:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter a string: 011011101
String is not accepted.
```

QN 8:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter a string: ababababb
String is accepted.
```

QN 9:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter a string: aaaabb
Accepted
```

QN 10:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter the input string (0/1): 1110100101
The string 1110100101 is accepted by the NFA.
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```

QN 11:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter the input string (a/b): aabb
The string aabb is accepted by the PDA.
```

QN 12:

```
C:\csit\fourth_sem_jonash\toc X + v
Enter the input string (only 1s representing x): 111
The output tape is: 111111
```

## Output:

### QN 13:

```
C:\csit\fourth_sem_jonash\toc X + v

Follow the one based indexing

Enter the number of states:3

Give state numbers from 0 to 2
Enter number of final states    1

Enter final states::2

Enter the number of rules according to NFA::4

Define transition rule as "initial state input symbol final state"
0 0 1
0 1 2
1 0 1
1 1 2

Enter initial state::0

Solving according to DFA1-0-->2
1-1-->4
2-0-->2
2-1-->4
4-0-->0
4-1-->0
for 0 ----
The total number of distinct states are:
STATE 0 1
q0  0 0
q0  2 4
q1  2 4
q2  0 0

Enter string01

String takes the following path-->
1-2-4-
Final state - 4

String Accepted
Enter string10

String takes the following path-->
1-4-0-
Final state - 0

String Rejected
Enter string110

String takes the following path-->
1-4-0-0-
Final state - 0

String Rejected
```