$G=(V,T,S,P)$

$V=\{S, A, a, b\}$

$T=\{a,b\}$

S is start symbol

$P=\{S \rightarrow aA, A \rightarrow Aa, A \rightarrow b\}$

Parse or fail to parse:

1. aba
2. aaaba
3. abab

$G=(V,T,S,P)$

$V=\{S, A, 0, 1\}$

$T=\{0,1\}$

S is start symbol

$P=\{S \rightarrow \emptyset, S \rightarrow 0S, S \rightarrow 1A, S \rightarrow 1, A \rightarrow 1A, A \rightarrow 1\}$

Will the following parse?

4. 1010

5. 000

6. 111

7. What states result on input: 25, 25, R

8. What is the output on input: 25, 25, R

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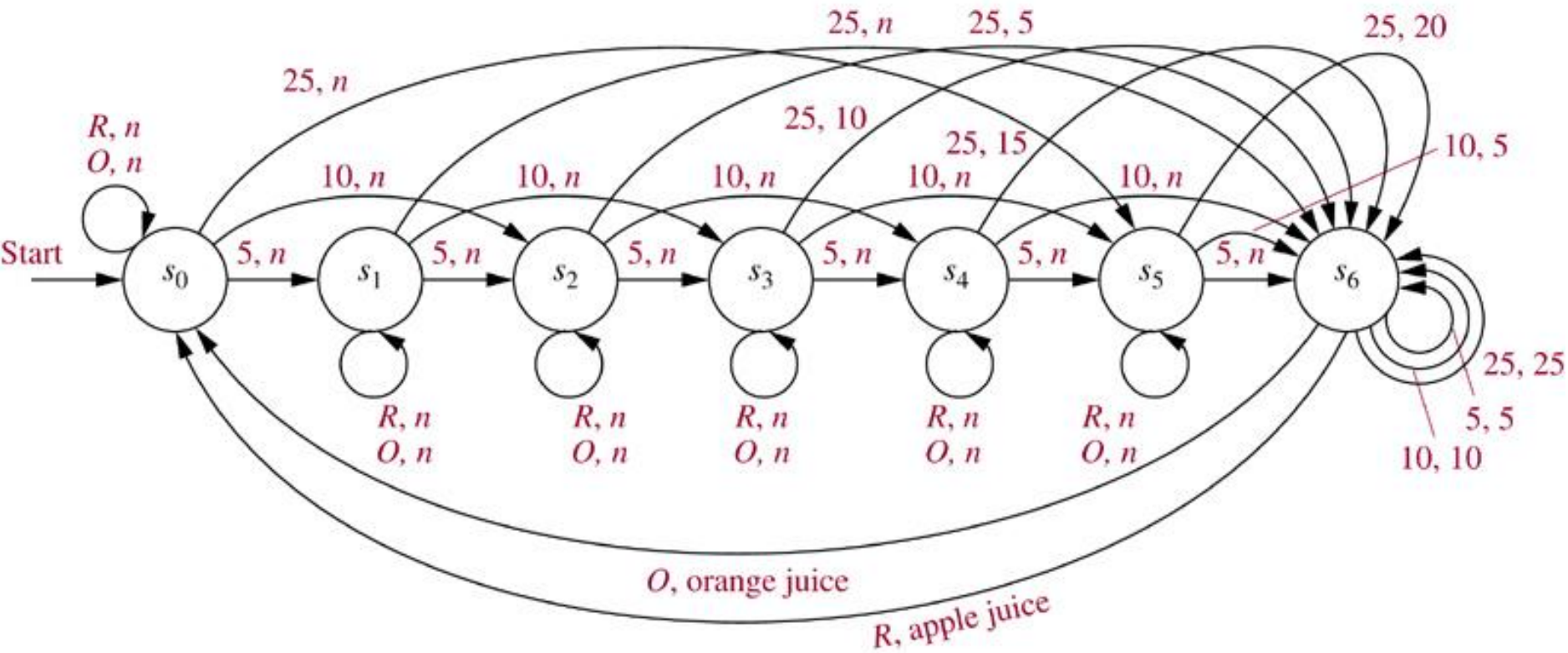

Output and state transitions for the input of:

9. 111
10. 00111

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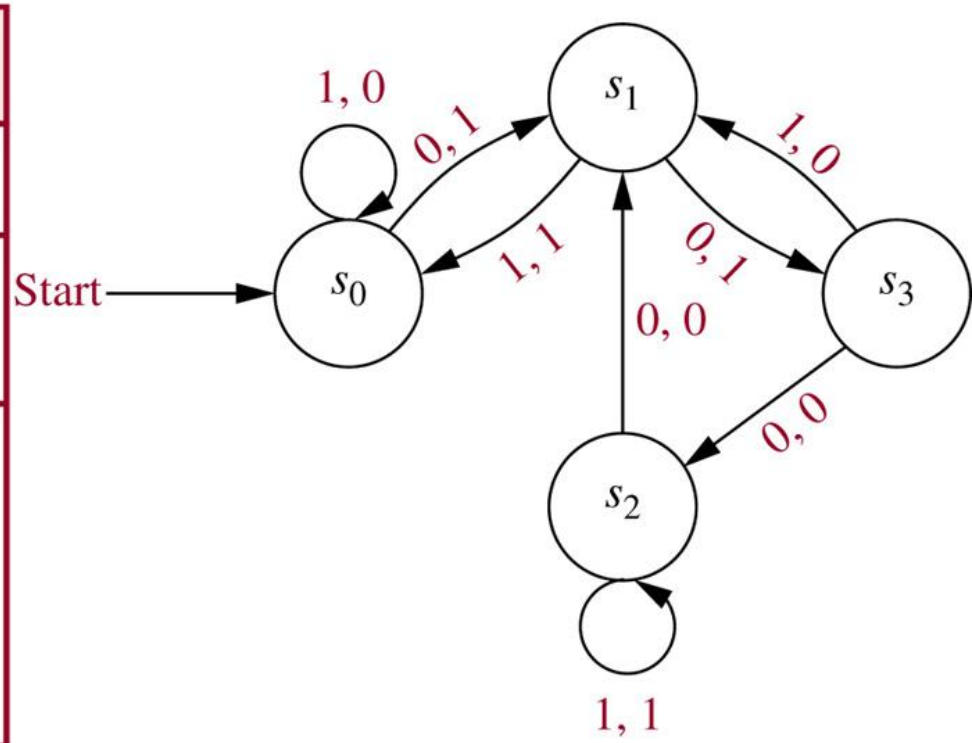
TABLE 2

State	f: Input 0	f: Input 1	g: Input 0	g: Input 1
s_0	s_1	s_0	1	0
s_1	s_3	s_0	1	1
s_2	s_1	s_2	0	1
s_3	s_2	s_1	0	0



G=(V,T,S,P)

V={S, A, a, b}

T={a,b}

S is start symbol

P={$S \rightarrow aA$, $A \rightarrow Aa$, $A \rightarrow b$ }

Parse:

1. aba

```
S
|
aA
  \
   Aa
   /
  b
```

2. aaaba

```
S
|
aA
  \
   Aa
   /
  b
Fails
```

3. abab

```
S
|
aA
  \
   b
Fails
```

G=(V,T,S,P)

V={S, A, 0, 1}

T={0,1}

S is start symbol

P={$S \rightarrow \emptyset$, $S \rightarrow 0S$, $S \rightarrow 1A$, $S \rightarrow 1$, $A \rightarrow 1A$, $A \rightarrow 1$ }

Will the following parse?

4. 1010 No

```
S
|
1A
  \
   ?
```

5. 000 Yes

```
S
|
0S
  \
   0S
     \
      0S
        \
         ∅
```

6. 111 Yes

```
S
|
A
|
1A
  \
   1A
     \
      1
```

7. What states result on input: 25, 25, R

s_0, s_5, s_6, s_0

8. What is the output on input: 25, 25, R

n, 20, apple juice

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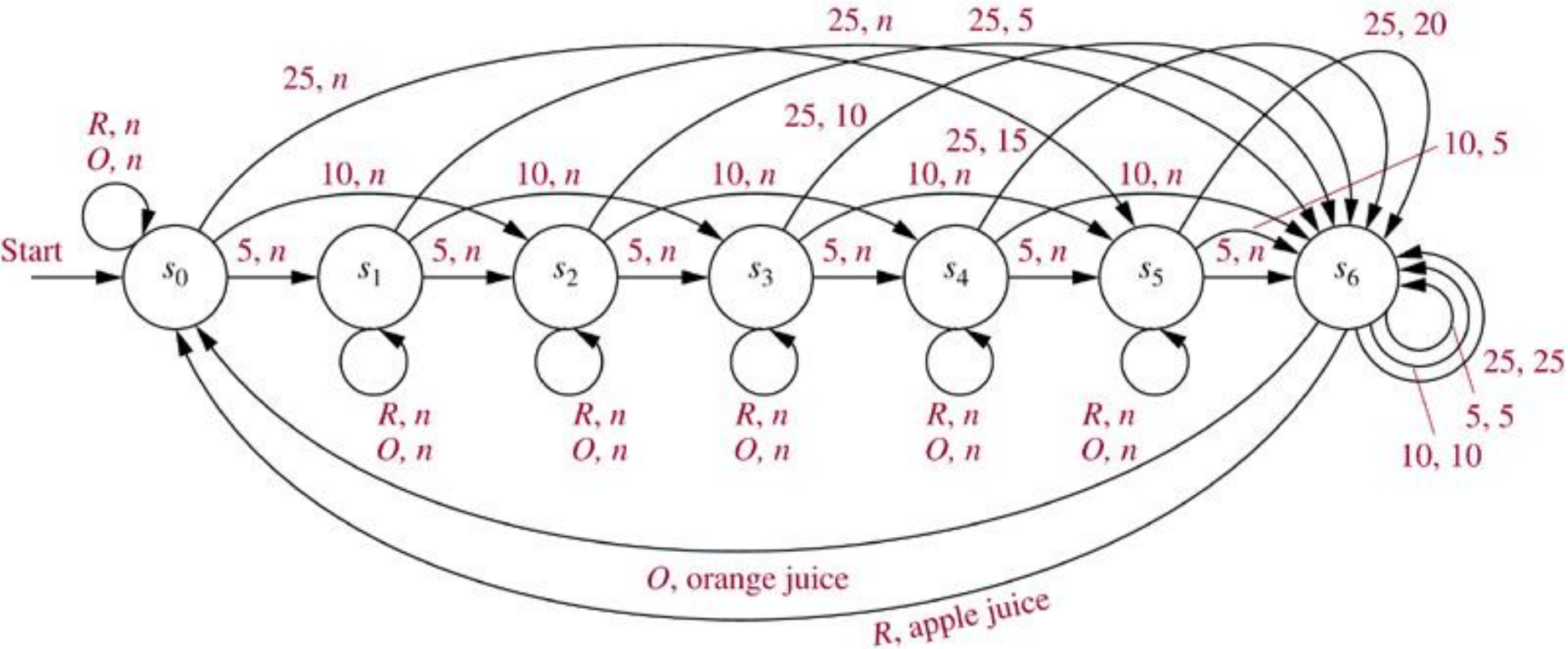

Output and state for the input of:

9.	111	000	s_0,s_0,s_0,s_0
10.	00111	11010	s_0,s_1,s_3,s_1,s_0,s_0

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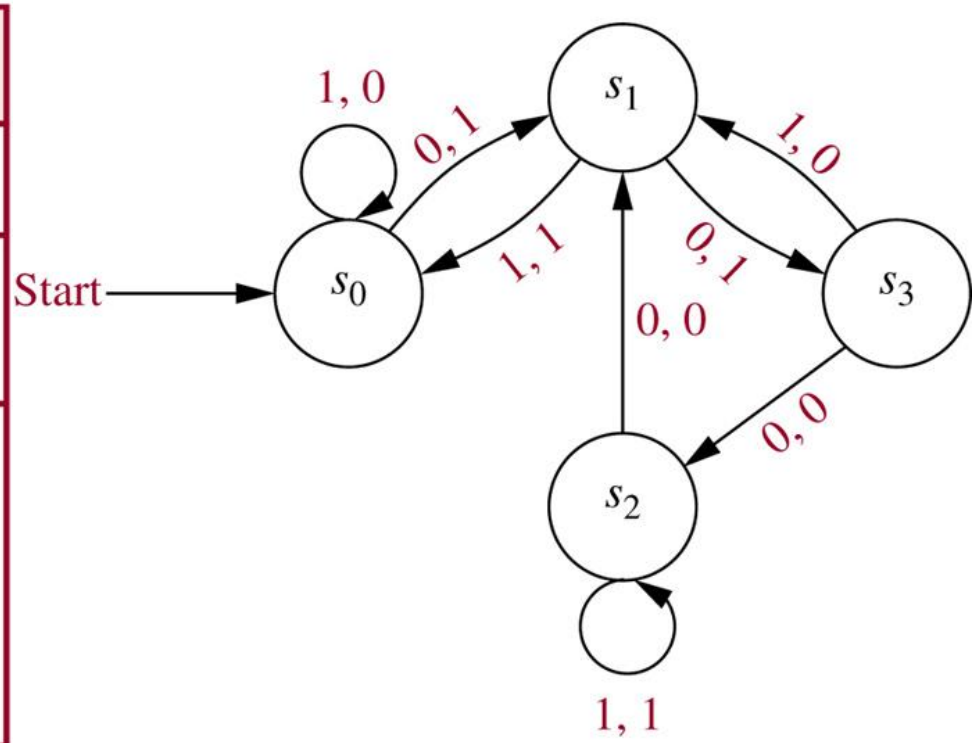
TABLE 2

State	f Input 0	f Input 1	g Input 0	g Input 1
s_0	s_1	s_0	1	0
s_1	s_3	s_0	1	1
s_2	s_1	s_2	0	1
s_3	s_2	s_1	0	0