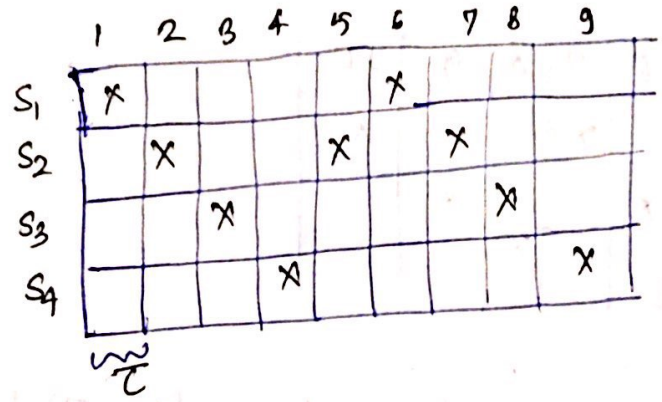
Lecture-4(AP)
04/02/2019

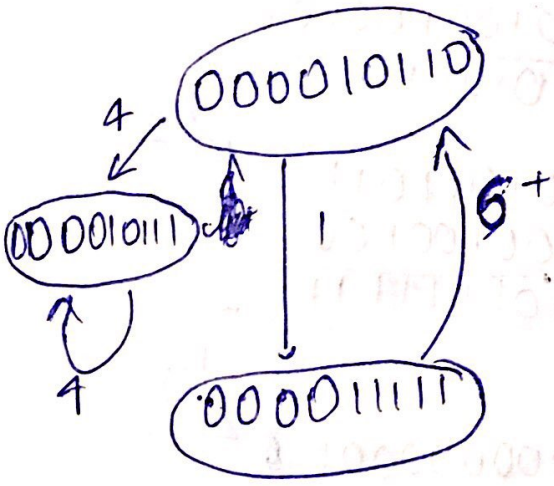


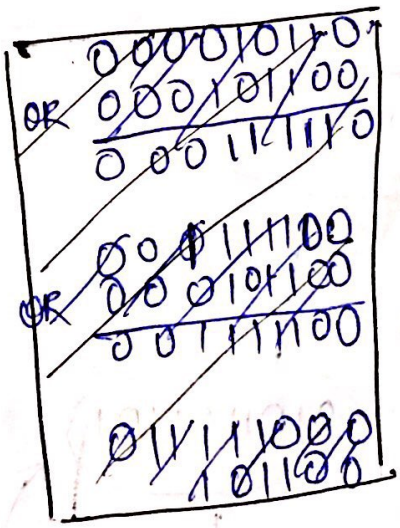
$$\tau = \max\{\tau_i\}^k + \tau_1$$

Forbidden latency = (6-1), (5-2), (7-5), (7-2), (8-3), (9-1)

= 5, 3, 2, 5, 5, 5

Collision vector (C) = 000010110





Permissible latency cycle

{(1,6), 4, 3}

Average latency cycle

$= \left\{\frac{1+6}{2}, \frac{4}{1}\right\}$

$= \{3.5, 4\}$

000001011
OR 000010110
000011111

000001111
OR 000010110
000011111

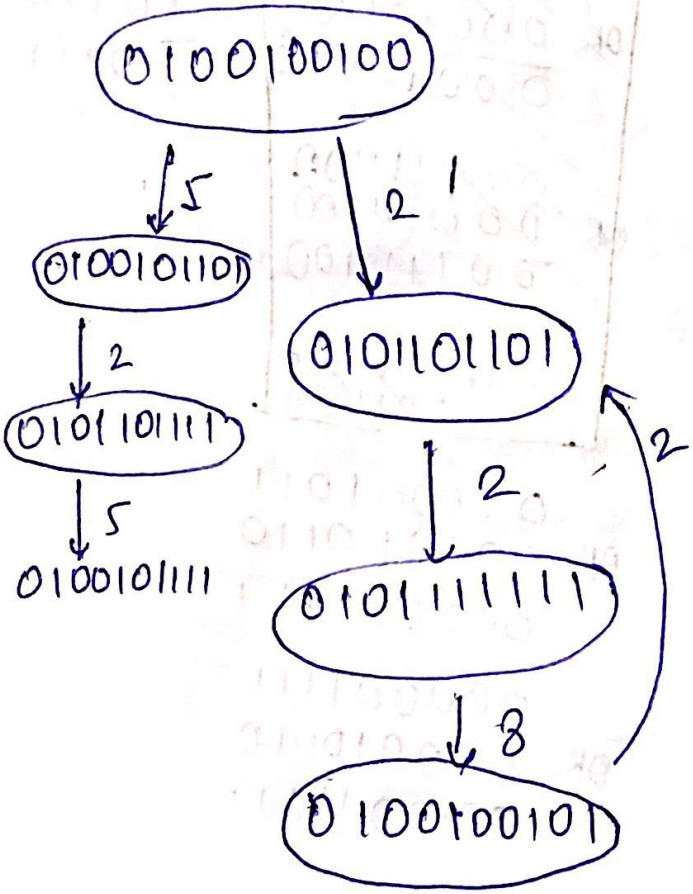
	1	2	3	4	5	6	7	8	9	10
S_1	X			X			X			X
S_2			X			X			X	
S_3		X			X			X		

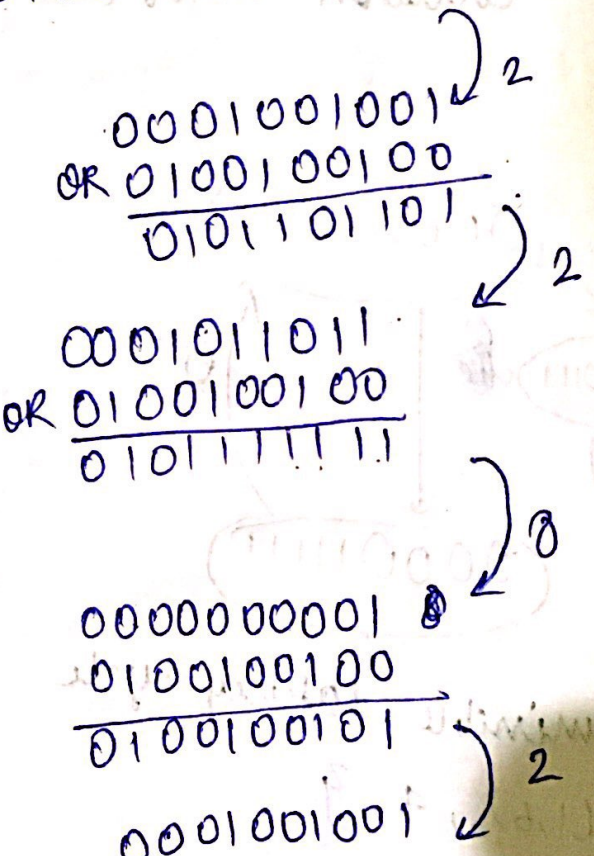
Forbidden latency = (4-1), (7-4), (7-1), (10-7), (10-4), (10-1), (6-3), (9-6), (9-3), (5-2), (8-5), (8-2)

= 3, 3, 6, 3, 6, 9, 3, 3, 6, 3, 3, 6

= (3, 6, 9)

Collision vector = 0100100100

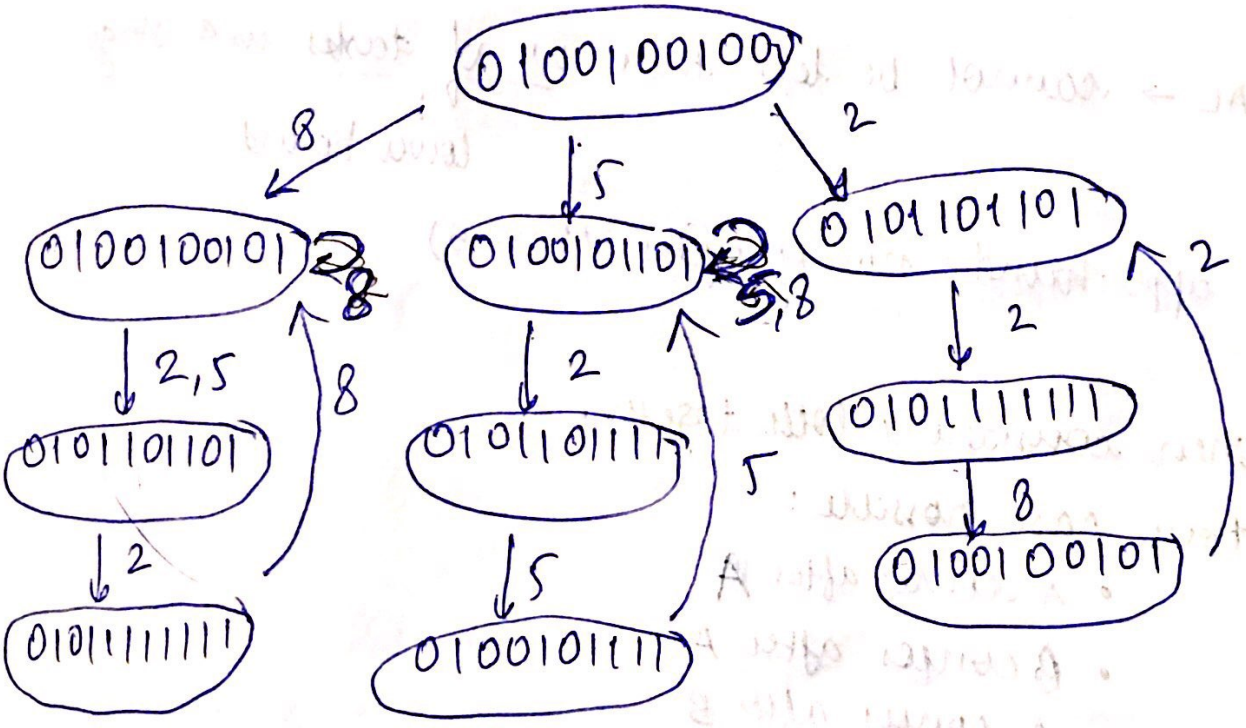




```
0000001001
0100100100
0100101101
```

```
0100100100
  ↓8
0000000001
0100100100
0100100101
  ↓2
0001001001
0100100100
0101101101
  ↓2
0001011011
0100100100
0101111111
  ↓8
0000000001
0100100100
0100100101
```

```
0100100100
  ↓5
0000001001
0100100100
0100101101
  ↓2
0001001011
0100100100
0101101111
  ↓5
0000001011
0100100100
0100101111
  ↓5
0000001001
0100100100
0100101101
```



Permissible latency cycle

Avg LC $= \{(8,2,2,8), (8,5,2,8), (8), (5), (5,2,5,5), (2,2,8,2)\}$

$= \{5, \frac{23}{4}, 8, 5, \frac{17}{4}, \frac{14}{4}\} = \{5, 5.75, 8, 5, 4.25, 3.5\}$

Minimum avg. latency (MAL) = 3.5