

# Lab 2

Input			Segment #						
A	B	C	0	1	2	3	4	5	6
0	0	0	1		1	1		1	1
0	0	1				1	1	1	1
0	1	0	1			1	1	1	1
0	1	1	1	1			1	1	1
1	0	0			1		1	1	1
1	0	1	1			1	1	1	1
1	1	0			1		1		1
1	1	1							

\*All blanks mean 0

Segment 0		00	01	11	10
		$\overline{B} \cdot \overline{C}$	$\overline{B} \cdot C$	$B \cdot C$	$B \cdot \overline{C}$
0	$\overline{A}$	1		1	1
1	$A$		1		

Segment 1		00	01	11	10
		$\overline{B} \cdot \overline{C}$	$\overline{B} \cdot C$	$B \cdot C$	$B \cdot \overline{C}$
0	$\overline{A}$			1	
1	$A$				

Segment 2		00	01	11	10
		$\overline{B} \cdot \overline{C}$	$\overline{B} \cdot C$	$B \cdot C$	$B \cdot \overline{C}$
0	$\overline{A}$	1			1
1	$A$	1			

Segment 3		00	01	11	10
		$\overline{B} \cdot \overline{C}$	$\overline{B} \cdot C$	$B \cdot C$	$B \cdot \overline{C}$
0	$\overline{A}$	1	1		1
1	$A$		1		

Segment 4		00	01	11	10
		$\overline{B} \cdot \overline{C}$	$\overline{B} \cdot C$	$B \cdot C$	$B \cdot \overline{C}$
0	$\overline{A}$		1	1	1
1	$A$	1	1		1

Segment 5		00	01	11	10
		$\overline{B} \cdot \overline{C}$	$\overline{B} \cdot C$	$B \cdot C$	$B \cdot \overline{C}$
0	$\overline{A}$	1	1	1	1
1	$A$	1	1		

Segment 6		00	01	11	10
		$\overline{B} \cdot \overline{C}$	$\overline{B} \cdot C$	$B \cdot C$	$B \cdot \overline{C}$
0	$\overline{A}$	1	1	1	1
1	$A$	1	1		1

**Segment 0**

	00	01	11	10
0	1	0	1	1
1	0	1	0	0

$$S_0 = ABC \cdot \overline{AB} \cdot \overline{AC}$$

**Segment 1**

	00	01	11	10
0	0	0	1	0
1	0	0	0	0

$$S_1 = \overline{A}BC$$

**Segment 2**

	00	01	11	10
0	1	0	0	0
1	1	0	0	1

$$S_2 = A\overline{C} \cdot \overline{B}C$$

**Segment 3**

	00	01	11	10
0	1	1	0	1
1	0	1	0	0

$$S_3 = \overline{B}C \cdot \overline{A}C$$

**Segment 4**

	00	01	11	10
0	0	1	1	1
1	1	1	0	1

$$S_4 = A\overline{C} \cdot \overline{B}C \cdot \overline{A}B$$

**Segment 5**

	00	01	11	10
0	1	1	1	1
1	1	1	0	0

$$S_5 = \overline{A}\overline{B}$$

**Segment 6**

	00	01	11	10
0	1	1	1	1
1	1	1	0	1

$$S_6 = \overline{A}B\overline{C}$$