

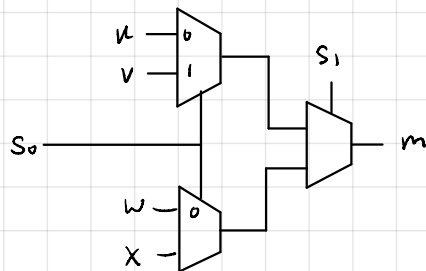
Part II

1. There are 6 inputs in total (u, v, w, x, s_0, s_1)

Each input has two different values (0, 1)

Therefore, there are $2^6 = 64$ rows

2.



s_0	s_1	m
0	0	u
1	0	v
0	1	w
1	1	x

Part III

(1, 4, 2, 3)

Segment 0

c_3	c_2	c_1	c_0	HEX
0	0	0	0	1
0	0	0	1	0
0	0	1	0	1
0	0	1	1	1
0	1	0	0	0
0	1	0	1	1
0	1	1	0	1
0	1	1	1	1
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	0
1	1	0	0	1
1	1	0	1	0
1	1	1	0	1
1	1	1	1	1

Segment 1

c_3	c_2	c_1	c_0	HEX
0	0	0	0	1
0	0	0	1	1
0	0	1	0	1
0	0	1	1	1
0	1	0	0	1
0	1	0	1	0
0	1	1	0	0
0	1	1	1	1
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	0
1	1	0	0	0
1	1	0	1	1
1	1	1	0	0
1	1	1	1	0

Segment 2

c_3	c_2	c_1	c_0	HEX
0	0	0	0	1
0	0	0	1	1
0	0	1	0	0
0	0	1	1	1
0	1	0	0	1
0	1	0	1	1
0	1	1	0	1
0	1	1	1	1
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	0
1	1	0	1	1
1	1	1	0	0
1	1	1	1	0

	$\bar{c}_1 \cdot \bar{c}_0$	$\bar{c}_1 \cdot c_0$	$c_1 \cdot \bar{c}_0$	$c_1 \cdot c_0$
$\bar{c}_3 \cdot \bar{c}_2$	1	0	1	1
$\bar{c}_3 \cdot c_2$	0	1	1	1
$c_3 \cdot \bar{c}_2$	1	0	1	1
$c_3 \cdot c_2$	1	1	0	1

	$\bar{c}_1 \cdot \bar{c}_0$	$\bar{c}_1 \cdot c_0$	$c_1 \cdot \bar{c}_0$	$c_1 \cdot c_0$
$\bar{c}_3 \cdot \bar{c}_2$	1	1	1	1
$\bar{c}_3 \cdot c_2$	1	0	1	0
$c_3 \cdot \bar{c}_2$	0	1	0	0
$c_3 \cdot c_2$	1	1	0	1

	$\bar{c}_1 \cdot \bar{c}_0$	$\bar{c}_1 \cdot c_0$	$c_1 \cdot \bar{c}_0$	$c_1 \cdot c_0$
$\bar{c}_3 \cdot \bar{c}_2$	1	1	1	0
$\bar{c}_3 \cdot c_2$	1	1	1	1
$c_3 \cdot \bar{c}_2$	0	1	0	0
$c_3 \cdot c_2$	1	1	1	1

↓

$$\bar{C}_2 \cdot \bar{C}_0 + C_3 \cdot \bar{C}_0 + \bar{C}_3 \cdot C_1 + C_2 \cdot C_1 + \bar{C}_3 \cdot C_2 \cdot C_0 + C_3 \cdot \bar{C}_2 \cdot \bar{C}_1$$

↓

$$\bar{C}_2 \cdot \bar{C}_0 + \bar{C}_3 \cdot \bar{C}_2 + \bar{C}_3 \cdot \bar{C}_1 \cdot \bar{C}_0 + C_3 \cdot \bar{C}_1 \cdot C_0 + \bar{C}_3 \cdot C_1 \cdot C_0$$

↓

$$\bar{C}_3 \cdot \bar{C}_1 + \bar{C}_3 \cdot C_0 + C_3 \cdot \bar{C}_2 + \bar{C}_3 \cdot C_2 + \bar{C}_1 \cdot C_0$$

Segment 3

C_3	C_2	C_1	C_0	HEX
0	0	0	0	1
0	0	0	1	0
0	0	1	0	1
0	0	1	1	1
0	1	0	0	0
0	1	0	1	1
0	1	1	0	1
0	1	1	1	0
1	0	0	0	1
1	0	0	1	0
1	0	1	0	0
1	0	1	1	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	0

Segment 4

C_3	C_2	C_1	C_0	HEX
0	0	0	0	1
0	0	0	1	0
0	0	1	0	1
0	0	1	1	0
0	1	0	0	0
0	1	0	1	0
0	1	1	0	1
0	1	1	1	0
1	0	0	0	1
1	0	0	1	0
1	0	1	0	1
1	0	1	1	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1

Segment 5

C_3	C_2	C_1	C_0	HEX
0	0	0	0	1
0	0	0	1	0
0	0	1	0	0
0	0	1	1	0
0	1	0	0	1
0	1	0	1	1
0	1	1	0	1
0	1	1	1	0
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	1
1	1	0	1	0
1	1	1	0	1
1	1	1	1	1

	$\bar{C}_1 \cdot \bar{C}_0$	$\bar{C}_1 \cdot C_0$	$C_1 \cdot C_0$	$C_1 \cdot \bar{C}_0$
$\bar{C}_3 \cdot \bar{C}_2$	1	0	0	0
$\bar{C}_3 \cdot C_2$	0	1	0	1
$C_3 \cdot C_2$	1	1	0	1
$C_3 \cdot \bar{C}_2$	1	0	1	0

$$\bar{C}_3 \cdot \bar{C}_2 \cdot \bar{C}_0 + C_3 \cdot \bar{C}_1 \cdot \bar{C}_0 + C_2 \cdot \bar{C}_1 \cdot C_0 + \bar{C}_2 \cdot C_1 \cdot C_0 + C_2 \cdot C_1 \cdot \bar{C}_0$$

	$\bar{C}_1 \cdot \bar{C}_0$	$\bar{C}_1 \cdot C_0$	$C_1 \cdot C_0$	$C_1 \cdot \bar{C}_0$
$\bar{C}_3 \cdot \bar{C}_2$	1	0	0	0
$\bar{C}_3 \cdot C_2$	0	0	0	1
$C_3 \cdot C_2$	1	1	1	1
$C_3 \cdot \bar{C}_2$	1	0	1	0

$$C_3 \cdot C_2 + C_1 \cdot \bar{C}_0 + \bar{C}_2 \cdot \bar{C}_0 + C_3 \cdot C_1$$

	$\bar{C}_1 \cdot \bar{C}_0$	$\bar{C}_1 \cdot C_0$	$C_1 \cdot C_0$	$C_1 \cdot \bar{C}_0$
$\bar{C}_3 \cdot \bar{C}_2$	1	0	0	0
$\bar{C}_3 \cdot C_2$	1	1	0	1
$C_3 \cdot C_2$	1	0	1	1
$C_3 \cdot \bar{C}_2$	1	1	1	1

$$\bar{C}_1 \cdot \bar{C}_0 + C_3 \cdot \bar{C}_2 + \bar{C}_3 \cdot C_2 \cdot \bar{C}_1 + C_3 \cdot C_2 \cdot C_1 + C_2 \cdot C_1 \cdot \bar{C}_0$$

Segment 6

C_3	C_2	C_1	C_0	HEX
0	0	0	0	0
0	0	0	1	0
0	0	1	0	1
0	0	1	1	1
0	1	0	0	1
0	1	0	1	1
0	1	1	0	1
0	1	1	1	0
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	0
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1

	$\bar{C}_1 \cdot \bar{C}_0$	$\bar{C}_1 \cdot C_0$	$C_1 \cdot C_0$	$C_1 \cdot \bar{C}_0$
$\bar{C}_3 \cdot \bar{C}_2$	0	0	1	1
$\bar{C}_3 \cdot C_2$	1	1	0	1
$C_3 \cdot C_2$	0	1	1	1
$C_3 \cdot \bar{C}_2$	1	1	1	1

$$C_3 \cdot \bar{C}_2 + C_1 \cdot \bar{C}_0 + C_3 \cdot C_0 + C_3 \cdot C_1 + \bar{C}_3 \cdot C_2 \cdot \bar{C}_1 + \bar{C}_3 \cdot \bar{C}_2 \cdot C_1$$