

For each truth table:

- draw Karnaugh map – select group of ones (prime implicants) and write simplified equation;
- draw Karnaugh map – select group of zeros (prime implicants) and write simplified equation;
- draw the block diagram for one of the equations.

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**Group 1 – Person 1**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	-	1	1	0	0	0	0	-	1
0	0	0	1	0	1	1	-	-	-	0	-	0	1
0	0	1	0	0	-	1	-	-	0	1	1	0	-
0	0	1	1	0	1	-	-	1	-	1	0	1	0
0	1	0	0	1	1	0	1	-	-	1	1	0	1
0	1	0	1	1	0	0	-	0	-	-	0	-	-
0	1	1	0	0	-	0	-	-	0	0	0	0	1
0	1	1	1	1	1	1	0	-	0	0	-	0	1
1	0	0	0	-	1	0	0	1	0	0	1	0	-
1	0	0	1	0	1	1	1	0	-	1	1	0	0
1	0	1	0	1	1	-	1	0	1	1	1	-	-
1	0	1	1	0	1	1	0	1	-	0	1	0	0
1	1	0	0	1	0	1	0	1	0	1	0	0	1
1	1	0	1	1	1	-	0	1	1	1	-	1	0
1	1	1	0	1	1	-	0	0	0	-	-	1	1
1	1	1	1	1	1	0	-	1	0	1	-	1	0

**Group 1 – Person 2**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	-	0	0	-	1	0	1	1	1
0	0	0	1	0	0	1	1	0	0	0	-	0	0
0	0	1	0	0	0	0	0	0	-	0	0	-	0
0	0	1	1	1	1	-	1	1	1	-	-	0	0
0	1	0	0	0	-	1	-	1	0	1	0	1	0
0	1	0	1	1	0	1	1	1	-	0	0	1	0
0	1	1	0	1	1	0	0	1	1	1	-	0	-
0	1	1	1	1	1	1	-	1	1	1	0	0	-
1	0	0	0	0	0	1	1	1	0	-	1	0	0
1	0	0	1	1	0	0	1	0	-	0	1	-	1
1	0	1	0	-	1	1	1	0	-	1	-	1	0
1	0	1	1	-	1	0	0	0	1	1	-	-	0
1	1	0	0	0	1	1	-	-	1	0	0	1	1
1	1	0	1	-	0	1	1	0	0	0	0	0	0
1	1	1	0	0	-	1	1	1	0	-	0	0	-
1	1	1	1	0	0	0	0	-	0	-	0	0	0

**Group 1 – Person 3**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	-	1	1	-	1	1	1	-	1
0	0	0	1	1	-	1	0	1	-	1	1	0	-
0	0	1	0	1	-	0	1	0	1	-	1	1	-
0	0	1	1	1	0	0	1	1	0	1	0	1	1
0	1	0	0	1	1	1	0	0	1	0	1	1	0
0	1	0	1	1	0	0	1	1	1	0	-	1	0
0	1	1	0	-	-	0	1	0	1	0	1	-	0
0	1	1	1	1	-	1	0	1	1	1	0	0	-
1	0	0	0	1	1	-	1	0	1	1	0	-	0
1	0	0	1	0	0	0	1	1	1	1	0	1	0
1	0	1	0	1	0	0	0	-	1	1	-	-	-
1	0	1	1	1	-	0	1	-	1	1	0	0	-
1	1	0	0	0	1	1	1	1	-	-	1	0	0
1	1	0	1	0	1	0	0	1	1	1	0	1	1
1	1	1	0	-	1	-	-	1	-	-	1	1	1
1	1	1	1	-	1	0	0	0	0	-	1	0	0

**Group 1 – Person 4**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	1	0	1	-	0	1	0	1	0
0	0	0	1	1	0	1	1	1	1	0	0	0	-
0	0	1	0	-	-	1	1	0	0	0	1	1	0
0	0	1	1	0	1	1	1	1	0	0	0	0	1
0	1	0	0	1	0	-	-	1	0	1	1	1	0
0	1	0	1	1	0	-	0	1	1	0	1	-	1
0	1	1	0	0	1	1	0	1	0	0	0	0	-
0	1	1	1	0	1	1	1	0	1	0	1	1	1
1	0	0	0	1	1	1	0	0	1	1	1	0	0
1	0	0	1	0	-	0	1	1	-	1	0	-	-
1	0	1	0	-	1	-	0	1	0	1	1	-	-
1	0	1	1	0	-	-	0	0	0	0	1	0	0
1	1	0	0	1	-	1	1	-	0	1	0	0	-
1	1	0	1	-	-	-	-	0	0	-	-	0	1
1	1	1	0	0	1	0	1	1	0	0	1	0	0
1	1	1	1	0	-	0	0	1	1	-	0	1	1

**Group 1 – Person 5**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	-	1	1	1	1	-	0	1	-
0	0	0	1	-	0	0	-	1	1	1	1	-	-
0	0	1	0	1	0	0	1	0	1	0	1	0	1
0	0	1	1	-	0	-	0	-	0	1	1	1	1
0	1	0	0	1	0	1	0	-	1	1	-	0	0
0	1	0	1	1	-	1	0	0	0	0	1	1	0
0	1	1	0	-	0	0	-	-	0	0	1	1	1
0	1	1	1	0	1	1	0	1	1	0	0	1	1
1	0	0	0	0	1	0	1	-	-	-	0	1	1
1	0	0	1	-	0	0	0	1	0	0	1	1	-
1	0	1	0	0	1	0	0	0	0	0	1	1	0
1	0	1	1	1	1	1	0	1	1	1	0	1	0
1	1	0	0	0	1	1	0	1	0	-	0	0	-
1	1	0	1	-	0	1	1	0	1	1	1	-	1
1	1	1	0	0	-	1	0	1	0	1	-	1	0
1	1	1	1	-	0	0	1	0	-	0	0	0	1

**Group 1 – Person 6**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	0	1	1	-	1	0	0	1	-
0	0	0	1	0	1	0	1	0	1	-	1	0	1
0	0	1	0	0	-	1	1	-	-	0	-	1	1
0	0	1	1	0	-	0	0	0	0	0	1	1	1
0	1	0	0	1	1	0	-	1	1	0	1	0	-
0	1	0	1	0	1	1	-	-	1	0	0	-	0
0	1	1	0	0	0	0	-	-	1	0	0	0	1
0	1	1	1	0	1	-	1	0	1	0	1	-	1
1	0	0	0	1	0	0	0	1	0	-	0	0	1
1	0	0	1	0	0	-	0	1	1	-	0	0	1
1	0	1	0	0	1	0	-	1	-	1	0	0	1
1	0	1	1	1	1	0	-	0	1	0	-	-	-
1	1	0	0	0	0	1	0	1	0	-	1	1	0
1	1	0	1	1	1	1	1	1	1	0	0	1	0
1	1	1	0	-	0	0	0	1	1	1	0	0	0
1	1	1	1	0	-	-	0	-	0	1	0	1	0

**Group 1 – Person 7**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	-	-	1	1	0	1	0	0	1	0
0	0	0	1	0	0	1	-	0	1	1	1	-	0
0	0	1	0	-	0	1	-	1	1	-	0	-	0
0	0	1	1	1	1	1	1	1	1	1	1	1	1
0	1	0	0	0	-	0	0	0	0	0	1	1	-
0	1	0	1	-	-	1	1	0	0	0	1	0	1
0	1	1	0	1	-	1	1	1	1	0	-	1	1
0	1	1	1	0	0	1	1	0	1	0	1	1	0
1	0	0	0	-	0	1	0	-	-	-	1	-	1
1	0	0	1	0	1	-	-	1	1	0	1	-	-
1	0	1	0	-	0	1	1	0	0	-	1	1	-
1	0	1	1	0	-	1	-	0	0	1	0	0	0
1	1	0	0	-	1	1	1	1	-	0	-	1	-
1	1	0	1	1	1	-	-	0	0	1	-	1	-
1	1	1	0	1	1	1	0	1	1	0	0	1	0
1	1	1	1	0	-	-	1	-	0	0	-	1	0

**Group 1 – Person 8**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	0	-	1	1	0	1	0	0	0
0	0	0	1	1	0	0	0	-	-	0	-	0	1
0	0	1	0	-	0	0	-	1	-	-	0	0	-
0	0	1	1	0	1	1	0	1	-	0	-	1	0
0	1	0	0	-	0	1	0	0	0	-	1	1	0
0	1	0	1	1	0	1	0	1	1	1	1	-	1
0	1	1	0	1	1	0	1	1	1	0	1	1	0
0	1	1	1	0	-	0	1	-	1	1	1	1	1
1	0	0	0	0	0	0	-	1	0	0	0	0	1
1	0	0	1	0	0	-	-	0	-	0	1	1	-
1	0	1	0	-	0	0	0	1	-	1	-	-	0
1	0	1	1	0	-	0	1	0	0	1	0	1	0
1	1	0	0	1	1	1	0	1	1	1	1	0	1
1	1	0	1	0	-	-	0	0	0	-	1	1	1
1	1	1	0	0	0	1	0	-	0	1	0	0	1
1	1	1	1	0	1	1	1	-	1	1	0	0	1

**Group 1 – Person 9**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	-	0	1	0	0	0	0	1	1	0
0	0	0	1	1	0	0	-	-	1	0	1	-	-
0	0	1	0	0	1	-	1	-	0	1	1	0	0
0	0	1	1	0	-	0	0	-	1	1	1	0	-
0	1	0	0	0	-	0	0	1	1	0	-	1	0
0	1	0	1	0	-	0	1	1	-	-	-	0	0
0	1	1	0	-	1	0	1	0	0	1	0	0	-
0	1	1	1	0	0	0	1	0	0	0	1	0	1
1	0	0	0	1	0	1	-	-	1	0	0	0	0
1	0	0	1	1	0	1	1	1	1	0	1	0	1
1	0	1	0	1	1	1	0	0	1	-	1	1	1
1	0	1	1	1	1	1	0	0	1	1	-	-	0
1	1	0	0	0	-	-	0	1	-	1	1	1	1
1	1	0	1	-	0	0	-	1	-	1	1	-	-
1	1	1	0	0	1	0	1	1	0	0	1	1	-
1	1	1	1	0	0	1	0	1	1	1	0	1	0

**Group 1 – Person 10**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	-	1	1	-	1	0	1	-	1	0
0	0	0	1	0	1	0	0	0	1	1	0	-	1
0	0	1	0	1	1	0	1	1	1	1	1	0	1
0	0	1	1	0	0	0	0	0	-	1	-	0	-
0	1	0	0	1	-	1	1	1	1	-	1	0	1
0	1	0	1	-	0	1	0	1	1	1	1	1	0
0	1	1	0	1	0	1	0	1	0	1	0	-	1
0	1	1	1	-	-	-	1	1	1	1	0	-	0
1	0	0	0	1	-	0	1	0	0	1	1	0	-
1	0	0	1	1	0	-	0	1	0	-	0	1	0
1	0	1	0	0	0	-	0	0	0	1	-	0	1
1	0	1	1	0	-	1	0	1	1	0	0	0	1
1	1	0	0	1	0	-	1	1	0	1	0	0	1
1	1	0	1	0	0	0	0	0	-	1	-	1	0
1	1	1	0	0	1	1	0	1	-	1	1	0	-
1	1	1	1	0	0	-	1	-	1	1	1	1	1

**Group 1 – Person 11**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	-	0	0	0	0	0	-	1	0
0	0	0	1	1	0	0	-	1	-	0	0	1	0
0	0	1	0	-	-	0	0	0	-	1	-	1	-
0	0	1	1	1	-	-	1	0	1	-	1	1	0
0	1	0	0	0	1	1	0	1	0	1	0	1	1
0	1	0	1	1	0	0	1	1	1	0	0	0	0
0	1	1	0	0	-	1	0	1	1	0	1	0	0
0	1	1	1	1	1	1	0	0	-	1	0	0	0
1	0	0	0	1	1	1	1	0	-	1	1	1	1
1	0	0	1	-	0	-	0	0	1	0	-	-	0
1	0	1	0	-	1	1	0	0	0	0	1	0	0
1	0	1	1	1	-	-	1	1	0	0	0	1	0
1	1	0	0	1	0	0	0	0	-	1	0	0	1
1	1	0	1	1	-	-	-	1	0	1	0	0	0
1	1	1	0	0	0	0	0	1	1	1	-	0	0
1	1	1	1	0	0	-	0	-	1	1	1	0	0

**Group 1 – Person 12**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	-	0	1	0	1	0	0	1	1
0	0	0	1	0	1	0	0	0	-	1	1	0	0
0	0	1	0	1	0	1	0	-	0	0	-	0	0
0	0	1	1	1	1	0	0	0	1	-	1	0	0
0	1	0	0	1	1	1	1	0	-	-	0	1	-
0	1	0	1	-	1	0	-	0	0	0	1	0	1
0	1	1	0	0	1	1	1	1	0	-	1	-	0
0	1	1	1	0	-	0	0	0	1	1	-	1	-
1	0	0	0	1	-	1	1	0	1	0	-	0	0
1	0	0	1	1	1	1	1	-	0	0	1	1	1
1	0	1	0	-	-	0	1	0	1	0	0	-	0
1	0	1	1	1	-	1	1	1	1	-	0	-	0
1	1	0	0	0	0	1	0	0	0	1	-	0	0
1	1	0	1	1	0	1	-	0	1	1	1	-	-
1	1	1	0	1	-	0	-	-	1	1	0	-	1
1	1	1	1	-	0	-	-	-	1	-	-	0	1

**Group 1 – Person 13**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	0	-	1	1	1	0	1	0	1
0	0	0	1	0	1	0	0	-	1	0	1	1	0
0	0	1	0	1	1	1	1	1	1	0	1	-	0
0	0	1	1	1	0	1	-	1	0	1	1	1	-
0	1	0	0	0	0	-	0	-	1	0	0	-	-
0	1	0	1	1	0	0	1	0	1	0	1	1	0
0	1	1	0	1	1	-	0	-	0	1	0	-	1
0	1	1	1	1	1	0	-	1	1	-	-	1	-
1	0	0	0	0	1	0	0	-	0	-	0	1	0
1	0	0	1	1	0	1	-	1	0	1	0	0	1
1	0	1	0	1	0	0	0	1	-	1	-	0	0
1	0	1	1	1	1	1	0	1	0	1	0	1	0
1	1	0	0	0	-	1	0	0	1	1	0	0	1
1	1	0	1	0	-	1	1	0	-	0	1	1	1
1	1	1	0	0	-	-	1	0	-	0	-	1	1
1	1	1	1	1	1	1	0	-	1	1	1	-	0

**Group 1 – Person 14**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	1	1	1	-	0	1	1	0	0
0	0	0	1	0	1	0	1	0	0	1	1	0	-
0	0	1	0	1	1	0	0	0	1	1	1	0	0
0	0	1	1	-	-	0	-	0	-	0	1	0	-
0	1	0	0	0	0	1	1	0	0	1	1	0	0
0	1	0	1	-	-	0	1	0	0	0	-	1	1
0	1	1	0	1	1	1	0	1	1	-	-	0	-
0	1	1	1	0	1	0	0	-	0	0	-	-	1
1	0	0	0	0	1	-	0	-	1	1	1	1	1
1	0	0	1	0	0	1	0	1	0	1	1	0	0
1	0	1	0	0	-	1	0	1	1	0	0	0	1
1	0	1	1	1	1	-	1	-	1	1	1	0	1
1	1	0	0	0	1	0	0	0	1	1	0	-	0
1	1	0	1	1	1	1	0	0	-	1	1	0	1
1	1	1	0	1	-	0	0	1	0	0	0	-	0
1	1	1	1	1	1	0	0	1	0	0	0	0	1

**Group 1 – Person 15**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	-	-	1	0	0	1	1	0	-	-
0	0	0	1	0	1	0	0	0	0	1	1	0	0
0	0	1	0	0	1	1	1	1	0	-	1	0	1
0	0	1	1	1	1	-	1	1	-	0	1	1	1
0	1	0	0	1	0	-	1	0	-	0	1	0	1
0	1	0	1	1	0	1	0	0	1	1	0	0	0
0	1	1	0	0	1	0	1	1	1	1	0	-	1
0	1	1	1	0	0	1	1	1	1	1	-	1	-
1	0	0	0	1	1	-	0	0	0	1	0	-	0
1	0	0	1	0	1	0	1	0	1	1	1	0	1
1	0	1	0	0	-	-	0	1	-	1	1	0	-
1	0	1	1	1	1	1	0	1	1	1	-	1	-
1	1	0	0	0	1	1	0	1	1	1	0	0	1
1	1	0	1	1	1	1	-	1	1	1	1	-	-
1	1	1	0	0	-	1	0	-	0	1	0	0	1
1	1	1	1	1	1	1	-	1	0	0	1	-	0

**Group 1 – Person 16**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	0	-	0	1	1	0	-	0	0
0	0	0	1	1	0	1	0	-	0	0	0	-	-
0	0	1	0	1	1	0	1	0	1	0	0	-	0
0	0	1	1	1	0	0	-	1	1	0	0	1	1
0	1	0	0	-	1	-	-	-	1	0	0	1	-
0	1	0	1	1	1	0	1	-	0	1	-	-	0
0	1	1	0	1	-	1	-	0	0	0	-	0	-
0	1	1	1	-	1	-	0	1	1	1	-	1	0
1	0	0	0	0	1	1	1	0	1	-	-	1	1
1	0	0	1	1	0	0	1	0	-	1	1	1	1
1	0	1	0	-	1	-	0	1	1	0	-	0	0
1	0	1	1	0	0	1	1	-	1	0	1	-	1
1	1	0	0	1	1	1	0	0	0	1	0	1	-
1	1	0	1	-	0	1	-	1	0	1	0	0	1
1	1	1	0	-	1	-	1	0	1	0	0	-	-
1	1	1	1	0	-	1	-	-	0	1	1	0	1



**Group 2 – Person 1**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	1	0	1	-	1	1	-	0	1
0	0	0	1	1	0	0	1	0	1	0	0	1	0
0	0	1	0	0	0	0	0	1	0	1	0	0	-
0	0	1	1	-	1	0	0	0	1	1	0	0	0
0	1	0	0	1	0	0	0	0	-	1	1	-	0
0	1	0	1	0	1	0	0	0	0	1	1	1	1
0	1	1	0	0	1	1	0	1	1	-	0	0	-
0	1	1	1	1	1	-	0	1	-	-	0	-	-
1	0	0	0	-	-	1	0	0	0	0	1	0	0
1	0	0	1	-	1	1	1	0	1	0	0	0	1
1	0	1	0	0	0	0	-	-	1	1	0	1	1
1	0	1	1	1	1	1	1	-	1	1	1	0	0
1	1	0	0	0	1	-	0	-	1	1	-	0	1
1	1	0	1	-	1	0	-	0	1	0	0	1	1
1	1	1	0	-	1	1	-	0	0	0	-	0	0
1	1	1	1	1	1	-	-	1	-	0	1	1	1

**Group 2 – Person 2**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	1	1	-	1	0	1	-	1	-
0	0	0	1	1	1	1	-	-	-	1	-	0	-
0	0	1	0	0	0	1	0	1	-	1	1	-	-
0	0	1	1	1	0	-	-	1	1	0	0	1	0
0	1	0	0	0	1	0	-	1	0	-	1	1	1
0	1	0	1	0	-	1	1	1	1	-	0	-	-
0	1	1	0	1	1	0	0	1	0	-	0	0	-
0	1	1	1	1	0	-	-	0	1	-	1	1	0
1	0	0	0	-	1	0	0	-	1	-	0	0	0
1	0	0	1	-	0	1	0	0	1	1	1	1	0
1	0	1	0	0	1	0	1	1	1	1	1	0	1
1	0	1	1	0	1	-	0	0	0	0	0	-	-
1	1	0	0	1	1	1	1	0	-	0	0	1	0
1	1	0	1	0	1	0	0	-	1	0	-	1	0
1	1	1	0	1	1	1	1	0	1	1	0	-	1
1	1	1	1	-	1	-	0	0	-	1	0	0	1

**Group 2 – Person 3**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	0	1	-	0	0	0	1	0	0
0	0	0	1	1	0	-	1	1	1	0	1	1	1
0	0	1	0	-	1	-	1	1	-	1	0	1	0
0	0	1	1	1	1	0	1	1	0	0	0	0	1
0	1	0	0	1	1	1	0	1	0	0	1	0	-
0	1	0	1	1	-	-	0	1	1	0	-	0	0
0	1	1	0	-	0	0	-	1	1	1	0	-	0
0	1	1	1	0	-	0	-	0	1	0	1	1	0
1	0	0	0	1	1	1	0	-	1	0	-	0	1
1	0	0	1	1	1	1	1	1	0	1	1	-	1
1	0	1	0	-	0	0	1	0	0	1	0	0	0
1	0	1	1	0	1	-	1	-	1	0	0	0	-
1	1	0	0	0	0	0	1	-	1	0	-	-	1
1	1	0	1	1	1	0	1	1	1	0	0	0	1
1	1	1	0	-	-	1	0	1	-	1	1	-	1
1	1	1	1	0	1	0	1	1	0	0	0	0	1

**Group 2 – Person 4**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	-	-	1	0	0	-	0	0	1
0	0	0	1	1	0	1	1	0	1	-	0	1	1
0	0	1	0	1	1	1	0	1	0	-	1	-	1
0	0	1	1	0	1	1	1	0	1	-	0	0	1
0	1	0	0	-	1	0	1	0	1	0	-	0	-
0	1	0	1	1	0	0	-	1	0	0	0	-	1
0	1	1	0	1	0	1	1	1	1	-	1	1	0
0	1	1	1	0	1	0	0	-	0	0	1	0	1
1	0	0	0	0	0	1	1	1	0	1	-	0	1
1	0	0	1	1	1	-	1	1	1	0	0	-	0
1	0	1	0	1	0	1	0	0	1	0	-	1	1
1	0	1	1	0	1	1	0	0	1	-	-	1	0
1	1	0	0	0	1	1	0	0	-	0	1	1	1
1	1	0	1	-	-	0	1	1	0	1	-	0	-
1	1	1	0	-	0	-	0	0	1	1	0	-	1
1	1	1	1	1	1	1	1	-	0	1	1	-	1

**Group 2 – Person 5**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	1	0	0	0	0	1	1	0	1
0	0	0	1	-	0	1	1	0	-	0	0	1	1
0	0	1	0	1	1	0	0	0	-	-	1	1	0
0	0	1	1	1	0	1	0	0	1	0	1	1	1
0	1	0	0	-	-	1	0	-	1	0	1	1	0
0	1	0	1	1	0	-	1	-	0	1	1	1	0
0	1	1	0	1	1	1	-	0	1	1	0	-	1
0	1	1	1	0	1	-	-	1	0	0	1	1	0
1	0	0	0	-	1	1	1	-	0	0	1	1	1
1	0	0	1	-	0	1	1	0	0	1	1	1	1
1	0	1	0	1	0	0	1	1	1	1	0	0	-
1	0	1	1	0	0	-	1	1	0	0	-	-	1
1	1	0	0	0	0	-	0	0	1	-	1	-	1
1	1	0	1	1	-	1	0	0	0	-	1	1	1
1	1	1	0	-	0	-	1	-	1	1	0	1	1
1	1	1	1	-	1	1	-	1	1	-	1	0	1

**Group 2 – Person 6**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	1	0	0	1	0	0	0	-	0
0	0	0	1	0	0	1	1	1	0	1	0	1	0
0	0	1	0	1	1	0	-	-	0	0	0	-	1
0	0	1	1	1	1	0	0	-	0	0	1	0	1
0	1	0	0	0	0	0	1	0	1	0	0	1	1
0	1	0	1	0	1	1	1	1	1	-	1	0	-
0	1	1	0	0	0	1	0	0	1	1	0	-	1
0	1	1	1	0	0	0	1	0	0	1	-	0	0
1	0	0	0	0	-	1	1	1	-	1	0	0	0
1	0	0	1	0	1	0	1	0	-	1	-	1	0
1	0	1	0	0	0	1	-	1	1	0	0	0	1
1	0	1	1	-	0	1	0	-	1	1	0	-	0
1	1	0	0	0	1	0	-	0	0	1	-	1	1
1	1	0	1	0	0	1	-	0	1	1	1	1	0
1	1	1	0	1	0	1	1	1	0	0	1	-	0
1	1	1	1	1	0	0	1	0	1	1	1	0	1

**Group 2 – Person 7**

<i>x</i>				<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>
<i>x</i> <sub>3</sub>	<i>x</i> <sub>2</sub>	<i>x</i> <sub>1</sub>	<i>x</i> <sub>0</sub>										
0	0	0	0	0	0	0	1	-	0	0	0	0	-
0	0	0	1	-	1	1	1	0	1	-	0	-	1
0	0	1	0	0	-	1	0	1	0	-	0	1	0
0	0	1	1	0	1	0	0	-	1	0	1	1	1
0	1	0	0	1	1	1	1	1	0	0	0	1	0
0	1	0	1	1	0	0	1	0	1	1	1	0	1
0	1	1	0	0	1	0	1	1	1	1	0	1	1
0	1	1	1	0	1	1	-	0	0	0	0	0	0
1	0	0	0	1	1	-	1	0	-	1	0	1	0
1	0	0	1	1	0	0	0	1	1	1	1	0	1
1	0	1	0	1	0	-	0	1	0	0	1	1	1
1	0	1	1	-	1	0	1	-	1	-	-	-	-
1	1	0	0	1	0	1	1	0	0	-	1	-	1
1	1	0	1	1	0	-	1	1	0	0	-	1	1
1	1	1	0	0	1	0	0	1	0	1	1	0	1
1	1	1	1	0	1	1	1	1	-	0	1	-	1

**Group 2 – Person 8**

<i>x</i>				<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>
<i>x</i> <sub>3</sub>	<i>x</i> <sub>2</sub>	<i>x</i> <sub>1</sub>	<i>x</i> <sub>0</sub>										
0	0	0	0	1	1	1	-	1	1	1	1	0	0
0	0	0	1	-	1	1	0	1	0	-	0	1	1
0	0	1	0	1	-	0	0	1	1	1	1	1	1
0	0	1	1	1	0	1	0	-	1	0	0	-	-
0	1	0	0	1	1	0	1	0	0	-	1	1	-
0	1	0	1	0	0	0	1	0	0	1	1	-	0
0	1	1	0	0	-	1	-	1	0	0	0	-	0
0	1	1	1	1	0	-	1	1	1	-	1	1	-
1	0	0	0	-	-	0	0	0	-	0	0	0	-
1	0	0	1	1	-	0	0	1	0	1	0	1	0
1	0	1	0	0	-	1	1	1	1	-	0	1	-
1	0	1	1	1	0	1	0	0	0	0	1	1	1
1	1	0	0	0	1	1	0	1	1	1	0	0	0
1	1	0	1	0	1	0	-	1	1	-	1	0	0
1	1	1	0	1	-	0	-	1	-	0	0	1	-
1	1	1	1	1	1	0	1	0	0	1	0	-	-

**Group 2 – Person 9**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	0	-	1	1	1	0	1	0	1
0	0	0	1	0	1	-	-	0	0	0	0	-	1
0	0	1	0	1	1	0	1	0	0	0	0	0	1
0	0	1	1	0	1	1	1	1	0	0	1	-	1
0	1	0	0	0	-	1	1	1	-	0	0	0	0
0	1	0	1	0	1	0	1	-	0	0	1	-	-
0	1	1	0	1	1	1	0	1	1	1	0	-	-
0	1	1	1	1	1	1	0	0	1	1	1	-	0
1	0	0	0	1	1	0	0	-	1	-	-	0	1
1	0	0	1	1	-	1	1	0	0	1	-	1	1
1	0	1	0	0	0	-	0	1	1	1	0	1	1
1	0	1	1	0	0	0	1	1	1	1	1	-	0
1	1	0	0	-	0	1	-	1	1	-	1	1	1
1	1	0	1	1	-	0	0	0	-	1	0	0	1
1	1	1	0	1	-	-	0	1	1	-	0	1	1
1	1	1	1	1	1	1	0	-	-	1	1	0	1

**Group 2 – Person 10**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	0	1	1	-	0	-	0	1	1
0	0	0	1	1	1	1	-	0	0	1	1	0	1
0	0	1	0	0	0	1	1	0	0	0	1	0	1
0	0	1	1	0	1	0	1	1	0	1	0	-	-
0	1	0	0	0	0	0	1	1	1	1	0	1	0
0	1	0	1	0	1	0	1	0	0	-	-	0	1
0	1	1	0	1	1	-	1	-	-	1	1	1	0
0	1	1	1	1	1	-	-	-	1	1	-	0	0
1	0	0	0	0	0	1	-	0	1	0	0	1	1
1	0	0	1	1	0	0	0	0	1	-	0	-	0
1	0	1	0	0	0	-	0	0	1	1	0	1	1
1	0	1	1	0	0	0	0	1	1	1	0	-	-
1	1	0	0	0	1	-	0	0	1	-	1	0	0
1	1	0	1	1	0	0	0	-	1	-	1	0	1
1	1	1	0	0	0	1	0	1	0	0	0	0	1
1	1	1	1	-	1	0	0	-	1	1	0	1	1

**Group 2 – Person 11**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	-	1	1	1	0	1	1	-	1
0	0	0	1	1	-	1	0	0	1	0	-	-	1
0	0	1	0	1	-	1	1	0	1	-	0	0	-
0	0	1	1	0	0	1	1	0	1	1	0	1	1
0	1	0	0	1	1	0	0	0	-	1	-	0	1
0	1	0	1	-	0	0	0	0	1	0	-	0	0
0	1	1	0	-	0	-	1	-	1	1	1	-	0
0	1	1	1	0	1	0	-	1	-	0	1	-	0
1	0	0	0	0	0	0	1	0	1	0	-	0	-
1	0	0	1	0	0	-	1	1	-	1	1	1	1
1	0	1	0	1	1	1	1	1	0	-	0	-	1
1	0	1	1	0	1	0	-	0	0	0	1	1	0
1	1	0	0	0	1	1	1	1	0	1	1	0	1
1	1	0	1	-	1	-	1	0	-	0	0	1	0
1	1	1	0	1	-	0	0	1	-	-	-	0	1
1	1	1	1	-	0	1	0	1	-	1	1	0	0

**Group 2 – Person 12**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	1	0	1	1	-	1	0	1	0
0	0	0	1	1	0	1	1	0	1	1	1	1	-
0	0	1	0	-	1	0	1	1	-	1	1	0	0
0	0	1	1	-	1	-	-	-	1	0	-	1	0
0	1	0	0	1	1	1	0	1	0	0	0	0	-
0	1	0	1	-	0	-	1	1	1	0	0	1	0
0	1	1	0	1	1	1	-	0	1	1	1	1	1
0	1	1	1	0	1	-	-	0	-	0	0	1	1
1	0	0	0	0	1	1	0	-	1	1	1	-	0
1	0	0	1	1	0	1	0	1	0	0	1	1	0
1	0	1	0	1	1	0	0	1	1	1	-	0	1
1	0	1	1	-	0	0	-	1	0	0	1	0	0
1	1	0	0	0	0	1	1	-	0	-	0	1	0
1	1	0	1	0	0	1	1	-	0	-	1	0	0
1	1	1	0	0	0	-	1	1	1	0	1	1	1
1	1	1	1	1	1	-	1	1	0	0	-	0	0

**Group 2 – Person 13**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	1	-	-	0	1	1	0	1	0
0	0	0	1	0	0	0	-	1	0	1	1	0	1
0	0	1	0	0	0	0	0	-	1	0	0	0	1
0	0	1	1	-	-	1	1	1	0	-	0	1	1
0	1	0	0	1	0	-	1	-	-	1	0	0	0
0	1	0	1	1	0	-	1	-	0	-	0	-	-
0	1	1	0	1	1	0	-	1	-	0	1	-	1
0	1	1	1	-	-	0	0	1	1	1	1	0	0
1	0	0	0	-	0	1	0	1	1	1	0	-	0
1	0	0	1	1	0	0	0	-	0	-	1	1	1
1	0	1	0	-	0	0	1	-	0	0	1	1	0
1	0	1	1	1	1	0	0	0	-	-	1	-	0
1	1	0	0	0	-	0	0	0	1	-	-	0	0
1	1	0	1	-	0	0	0	1	0	-	-	-	0
1	1	1	0	1	0	1	0	0	0	1	0	1	1
1	1	1	1	-	0	1	1	0	-	0	0	0	0

**Group 2 – Person 14**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	-	0	1	-	1	-	1	-	0
0	0	0	1	1	0	-	1	1	0	1	0	1	-
0	0	1	0	1	-	0	-	0	-	1	0	1	1
0	0	1	1	0	0	0	1	1	-	0	0	0	0
0	1	0	0	1	0	1	1	1	-	0	0	0	0
0	1	0	1	0	-	-	1	1	0	1	0	1	1
0	1	1	0	-	0	0	0	1	1	-	1	1	-
0	1	1	1	1	0	1	1	-	1	1	1	0	0
1	0	0	0	0	1	0	0	1	0	0	1	1	1
1	0	0	1	1	0	1	-	-	0	1	1	0	0
1	0	1	0	0	0	-	-	0	1	-	0	1	1
1	0	1	1	0	-	1	-	1	1	-	1	1	0
1	1	0	0	-	1	0	0	0	0	0	1	1	0
1	1	0	1	0	1	0	1	0	0	-	0	1	1
1	1	1	0	1	-	1	1	0	1	1	1	-	0
1	1	1	1	1	-	-	1	1	1	0	0	0	1

**Group 2 – Person 15**

<i>x</i>				<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>
<i>x</i> <sub>3</sub>	<i>x</i> <sub>2</sub>	<i>x</i> <sub>1</sub>	<i>x</i> <sub>0</sub>										
0	0	0	0	-	0	-	-	1	1	0	1	0	1
0	0	0	1	0	-	0	0	-	0	1	0	1	0
0	0	1	0	1	1	0	1	0	0	1	0	-	0
0	0	1	1	0	-	0	1	0	-	-	-	0	1
0	1	0	0	1	0	1	1	0	1	0	1	1	0
0	1	0	1	0	1	0	0	0	-	1	0	0	0
0	1	1	0	1	-	-	0	0	1	1	0	1	0
0	1	1	1	1	1	0	0	-	0	0	0	0	0
1	0	0	0	1	0	0	1	1	1	0	1	0	0
1	0	0	1	-	0	0	0	0	1	0	0	-	1
1	0	1	0	1	0	-	0	0	-	1	-	-	0
1	0	1	1	1	1	-	1	-	-	1	-	0	-
1	1	0	0	0	0	1	0	0	1	-	1	0	-
1	1	0	1	0	1	1	0	1	1	1	0	-	0
1	1	1	0	-	1	0	-	-	-	0	-	0	-
1	1	1	1	-	0	-	1	1	0	0	0	1	1

**Group 2 – Person 16**

<i>x</i>				<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>
<i>x</i> <sub>3</sub>	<i>x</i> <sub>2</sub>	<i>x</i> <sub>1</sub>	<i>x</i> <sub>0</sub>										
0	0	0	0	0	1	1	0	0	1	0	0	1	0
0	0	0	1	0	1	0	0	-	-	-	1	1	-
0	0	1	0	0	1	0	-	1	0	0	1	1	1
0	0	1	1	0	-	1	1	0	0	0	1	0	0
0	1	0	0	1	0	0	-	0	1	0	0	0	0
0	1	0	1	-	1	1	1	0	0	0	-	0	-
0	1	1	0	1	1	-	0	0	0	0	1	1	1
0	1	1	1	0	1	0	0	0	-	0	1	-	1
1	0	0	0	0	1	1	-	0	0	1	1	1	-
1	0	0	1	0	-	1	-	0	-	1	1	-	1
1	0	1	0	0	0	-	-	1	1	1	1	0	-
1	0	1	1	-	-	1	1	0	0	1	-	0	0
1	1	0	0	0	0	1	0	0	-	0	0	1	-
1	1	0	1	0	0	0	1	1	-	-	0	0	1
1	1	1	0	-	-	1	1	1	-	1	0	0	-
1	1	1	1	0	-	1	-	0	-	0	1	1	1



**Group 3 – Person 1**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	1	1	1	0	0	1	0	0	0
0	0	0	1	1	0	1	1	0	0	0	0	0	1
0	0	1	0	1	1	1	0	1	1	0	0	-	1
0	0	1	1	0	-	1	-	0	1	1	1	1	1
0	1	0	0	0	1	1	0	1	-	0	-	-	-
0	1	0	1	-	0	1	0	0	1	0	1	0	1
0	1	1	0	1	0	-	0	-	0	1	1	1	0
0	1	1	1	0	-	1	0	1	-	1	1	1	0
1	0	0	0	0	-	0	1	0	1	1	0	0	1
1	0	0	1	1	1	0	0	1	0	1	0	-	0
1	0	1	0	1	0	0	1	0	-	-	1	1	1
1	0	1	1	0	0	1	1	0	1	1	1	-	-
1	1	0	0	0	1	0	0	1	0	1	-	-	1
1	1	0	1	-	-	1	-	0	1	-	1	1	0
1	1	1	0	0	1	1	-	1	1	0	0	0	0
1	1	1	1	0	1	0	0	0	0	1	0	0	0

**Group 3 – Person 2**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	1	0	1	0	-	1	0	-	1	0	1
0	0	1	0	1	1	1	-	1	1	1	0	-	-
0	0	1	1	1	0	1	0	0	1	1	1	0	1
0	1	0	0	1	0	-	0	-	-	0	1	0	1
0	1	0	1	0	-	-	0	0	1	-	-	0	1
0	1	1	0	1	1	1	-	0	1	0	0	0	-
0	1	1	1	0	0	0	0	1	0	0	-	-	1
1	0	0	0	1	1	-	-	1	1	1	1	0	0
1	0	0	1	0	-	-	0	0	-	1	1	0	1
1	0	1	0	-	1	0	1	0	1	1	0	-	0
1	0	1	1	1	-	-	1	1	0	0	1	-	1
1	1	0	0	0	1	-	-	-	1	1	-	1	-
1	1	0	1	1	0	-	-	1	0	1	0	0	1
1	1	1	0	1	0	0	-	0	1	1	0	0	1
1	1	1	1	-	1	0	1	1	0	0	-	0	0

**Group 3 – Person 3**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	0	-	0	-	0	-	0	-	1
0	0	0	1	-	1	0	0	0	0	-	0	-	-
0	0	1	0	1	1	1	-	1	1	0	1	1	-
0	0	1	1	1	0	1	0	0	1	1	0	-	1
0	1	0	0	-	1	0	1	0	0	1	1	0	1
0	1	0	1	1	0	0	0	-	0	1	1	0	1
0	1	1	0	-	1	1	0	-	1	-	1	0	-
0	1	1	1	0	1	0	1	0	1	1	1	0	0
1	0	0	0	0	0	0	1	1	1	0	0	1	0
1	0	0	1	1	0	1	1	0	-	-	1	0	1
1	0	1	0	0	0	1	-	0	0	-	0	1	1
1	0	1	1	1	1	-	1	1	0	-	0	0	1
1	1	0	0	1	0	0	0	0	1	0	1	1	0
1	1	0	1	1	1	0	0	1	-	0	0	0	0
1	1	1	0	1	1	-	-	0	0	0	0	-	0
1	1	1	1	-	1	1	0	0	-	0	1	0	0

**Group 3 – Person 4**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	1	1	1	0	1	-	0	-	0
0	0	0	1	1	-	0	1	1	-	1	1	1	0
0	0	1	0	1	0	0	0	0	1	0	0	-	-
0	0	1	1	1	1	0	1	0	1	1	0	-	-
0	1	0	0	0	0	1	1	0	1	1	1	1	0
0	1	0	1	1	0	0	1	1	1	0	1	0	0
0	1	1	0	1	-	0	-	-	-	1	1	0	1
0	1	1	1	0	1	1	0	1	0	1	1	-	1
1	0	0	0	1	1	-	0	0	0	0	0	1	-
1	0	0	1	-	1	1	-	0	0	0	1	1	1
1	0	1	0	1	1	1	1	0	1	1	1	-	1
1	0	1	1	1	1	0	1	1	1	-	-	1	-
1	1	0	0	1	-	-	0	1	0	0	0	-	0
1	1	0	1	0	0	0	0	1	0	1	-	1	0
1	1	1	0	-	-	0	1	1	0	1	-	1	-
1	1	1	1	1	0	1	1	0	1	1	0	0	0

**Group 3 – Person 5**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	1	0	-	1	-	1	1	-	1
0	0	0	1	0	1	0	1	1	1	0	-	0	1
0	0	1	0	1	1	0	-	0	0	1	1	-	0
0	0	1	1	-	0	0	1	0	0	1	0	1	1
0	1	0	0	1	1	1	0	0	1	-	0	-	0
0	1	0	1	0	1	0	0	1	0	1	0	0	0
0	1	1	0	1	1	0	1	0	0	1	-	0	0
0	1	1	1	0	1	1	1	1	0	0	1	1	1
1	0	0	0	0	0	1	0	1	-	1	0	-	0
1	0	0	1	1	-	-	1	-	0	1	1	-	1
1	0	1	0	1	0	1	0	1	1	0	1	-	0
1	0	1	1	1	1	1	0	0	0	0	0	0	0
1	1	0	0	0	1	1	1	1	1	1	1	-	0
1	1	0	1	0	1	0	-	0	1	-	0	0	0
1	1	1	0	1	0	0	1	-	0	0	1	0	1
1	1	1	1	1	1	1	1	0	1	1	1	0	1

**Group 3 – Person 6**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	-	0	0	-	0	1	1	1	1	1
0	0	0	1	0	1	0	0	1	1	0	0	0	1
0	0	1	0	1	0	0	0	1	0	0	1	-	0
0	0	1	1	0	1	-	0	1	0	-	0	-	1
0	1	0	0	0	1	0	1	0	0	1	0	1	0
0	1	0	1	0	0	-	0	0	0	1	1	1	1
0	1	1	0	1	1	1	1	0	1	-	-	1	1
0	1	1	1	1	1	1	1	1	0	1	1	-	1
1	0	0	0	1	0	0	1	-	1	1	0	1	1
1	0	0	1	1	0	1	-	0	0	1	1	-	0
1	0	1	0	0	0	0	1	1	0	-	-	-	1
1	0	1	1	0	0	1	-	0	1	0	-	1	1
1	1	0	0	0	0	-	0	0	-	1	-	-	1
1	1	0	1	0	1	1	0	-	1	1	-	1	-
1	1	1	0	1	-	0	0	1	0	-	0	1	1
1	1	1	1	0	0	-	0	1	1	0	1	1	0

**Group 3 – Person 7**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	0	1	-	0	1	1	1	0	0
0	0	0	1	1	0	-	0	0	0	1	0	-	1
0	0	1	0	0	-	1	-	1	0	1	0	0	0
0	0	1	1	0	-	-	1	0	0	1	1	-	-
0	1	0	0	1	0	-	1	-	-	-	-	0	-
0	1	0	1	0	0	0	1	1	1	1	0	1	0
0	1	1	0	1	1	-	1	0	1	0	-	-	0
0	1	1	1	-	-	0	1	1	0	0	0	1	0
1	0	0	0	-	0	-	1	0	-	0	0	1	0
1	0	0	1	1	1	0	1	1	0	-	1	-	1
1	0	1	0	0	1	-	0	1	0	0	1	1	-
1	0	1	1	1	1	1	-	1	1	-	0	0	-
1	1	0	0	1	1	-	0	1	1	0	1	1	-
1	1	0	1	0	1	1	-	-	1	-	-	0	0
1	1	1	0	0	0	-	0	-	1	0	-	-	1
1	1	1	1	0	-	1	1	0	0	1	0	1	0

**Group 3 – Person 8**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	0	1	0	0	0	-	1	-	1
0	0	0	1	0	0	1	0	1	0	1	1	0	1
0	0	1	0	0	1	1	0	0	1	-	0	-	1
0	0	1	1	1	0	1	1	1	0	1	0	0	1
0	1	0	0	0	1	0	1	0	-	0	0	1	-
0	1	0	1	0	-	0	-	-	0	0	1	0	0
0	1	1	0	1	0	0	-	-	0	1	0	1	0
0	1	1	1	1	1	1	0	1	0	0	1	-	1
1	0	0	0	-	0	1	1	-	1	1	-	1	1
1	0	0	1	-	0	1	-	0	0	0	0	1	0
1	0	1	0	-	1	1	0	0	0	1	0	1	0
1	0	1	1	0	-	0	0	1	1	1	1	0	1
1	1	0	0	0	0	0	1	1	0	1	0	0	1
1	1	0	1	0	-	0	0	1	0	1	1	0	0
1	1	1	0	-	1	0	0	0	0	0	0	1	0
1	1	1	1	1	1	0	1	0	0	-	0	0	0

**Group 3 – Person 9**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	1	-	-	0	1	0	0	0	1
0	0	0	1	1	1	-	-	-	0	1	1	1	0
0	0	1	0	0	1	1	1	1	-	0	0	0	-
0	0	1	1	1	0	0	0	-	-	0	-	1	1
0	1	0	0	1	1	-	1	0	0	-	-	1	-
0	1	0	1	0	1	1	0	-	1	0	1	-	0
0	1	1	0	0	1	1	0	-	0	0	0	1	0
0	1	1	1	1	1	-	1	-	-	0	1	1	0
1	0	0	0	-	0	-	1	0	1	-	-	0	0
1	0	0	1	-	-	-	0	1	1	-	0	1	1
1	0	1	0	0	0	0	-	1	1	1	1	1	0
1	0	1	1	0	0	0	-	1	-	1	1	1	0
1	1	0	0	1	1	1	-	1	-	1	-	1	0
1	1	0	1	0	-	0	1	1	-	0	1	0	0
1	1	1	0	0	-	1	1	1	0	0	-	-	1
1	1	1	1	-	-	1	1	0	1	0	0	0	0

**Group 3 – Person 10**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	1	0	1	1	-	-	0	1	1
0	0	0	1	-	-	0	-	1	0	0	0	0	0
0	0	1	0	1	1	0	1	1	-	0	-	0	-
0	0	1	1	-	-	1	-	0	1	0	0	-	0
0	1	0	0	1	1	-	1	0	-	1	-	0	-
0	1	0	1	0	0	1	-	1	-	0	0	0	1
0	1	1	0	0	1	1	0	-	0	1	-	0	1
0	1	1	1	0	1	1	1	0	-	1	1	-	0
1	0	0	0	1	1	1	1	-	0	-	1	1	1
1	0	0	1	0	-	0	0	0	-	0	0	1	1
1	0	1	0	-	0	1	0	0	0	1	0	-	0
1	0	1	1	1	1	1	1	-	1	-	0	-	0
1	1	0	0	1	0	0	0	1	0	0	1	1	0
1	1	0	1	0	0	0	1	1	0	-	0	0	1
1	1	1	0	1	-	1	0	0	0	0	0	0	0
1	1	1	1	0	-	0	1	-	0	0	0	0	-

**Group 3 – Person 11**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	0	1	1	0	0	1	-	0	0
0	0	0	1	0	0	0	0	0	0	0	0	1	1
0	0	1	0	0	1	0	1	0	-	1	1	0	-
0	0	1	1	0	1	1	0	0	-	1	1	0	1
0	1	0	0	0	1	0	-	0	1	0	-	0	0
0	1	0	1	0	-	-	1	0	1	1	-	-	1
0	1	1	0	0	0	-	0	1	0	1	1	-	-
0	1	1	1	-	1	-	0	1	0	1	-	0	1
1	0	0	0	1	1	1	1	1	0	0	0	1	0
1	0	0	1	-	0	0	-	0	0	1	1	0	-
1	0	1	0	0	0	0	0	-	0	1	1	0	1
1	0	1	1	1	1	-	-	1	0	0	0	0	0
1	1	0	0	1	1	1	0	1	1	1	0	1	0
1	1	0	1	0	0	1	1	1	1	1	0	0	0
1	1	1	0	1	-	0	0	0	0	-	-	0	1
1	1	1	1	-	1	0	0	1	0	1	1	-	1

**Group 3 – Person 12**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	-	1	1	1	0	1	1	1	-	0
0	0	0	1	-	-	-	0	-	0	1	1	1	1
0	0	1	0	1	0	1	-	1	-	0	1	0	-
0	0	1	1	-	0	1	1	1	-	1	0	1	1
0	1	0	0	1	1	0	0	1	1	0	1	0	1
0	1	0	1	1	0	1	-	0	-	0	1	1	1
0	1	1	0	0	0	1	1	1	1	1	1	1	1
0	1	1	1	0	0	1	1	-	-	0	0	1	1
1	0	0	0	0	1	-	-	0	-	0	0	-	-
1	0	0	1	0	-	-	1	-	1	0	-	1	0
1	0	1	0	-	1	0	0	1	1	0	0	0	0
1	0	1	1	0	0	0	0	1	1	1	-	0	-
1	1	0	0	1	1	1	0	1	0	0	0	1	0
1	1	0	1	0	0	1	-	-	1	1	-	1	0
1	1	1	0	1	0	0	-	0	0	1	-	0	1
1	1	1	1	1	1	1	0	1	1	0	1	0	0

**Group 3 – Person 13**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	0	0	1	1	0	0	1	0	0
0	0	0	1	1	-	1	1	-	-	1	0	0	1
0	0	1	0	0	1	1	0	1	1	-	1	1	1
0	0	1	1	-	0	1	-	1	1	0	1	1	-
0	1	0	0	0	1	1	0	0	1	1	0	0	0
0	1	0	1	0	0	1	-	0	1	-	0	0	0
0	1	1	0	-	1	0	1	-	1	-	1	1	0
0	1	1	1	0	0	0	1	-	-	0	1	0	0
1	0	0	0	0	1	1	-	0	1	0	1	0	1
1	0	0	1	1	1	1	0	0	1	0	1	-	1
1	0	1	0	-	0	-	1	1	1	0	0	0	0
1	0	1	1	1	0	0	1	-	1	0	-	0	1
1	1	0	0	0	1	1	-	1	1	1	1	-	1
1	1	0	1	0	1	0	0	1	0	0	1	1	1
1	1	1	0	1	1	1	0	1	0	-	1	0	-
1	1	1	1	0	0	-	0	0	1	-	0	0	1

**Group 3 – Person 14**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	0	1	0	0	-	1	0	0	0	0
0	0	0	1	0	0	1	0	0	1	0	0	1	-
0	0	1	0	0	-	-	1	-	1	-	1	1	0
0	0	1	1	1	-	0	-	0	1	0	1	0	1
0	1	0	0	0	1	1	-	0	0	1	1	-	-
0	1	0	1	1	-	1	0	1	1	-	0	0	-
0	1	1	0	1	1	0	1	0	0	1	0	1	0
0	1	1	1	1	0	1	0	0	0	-	0	0	1
1	0	0	0	0	0	1	1	-	-	0	0	0	0
1	0	0	1	1	-	1	1	0	1	1	0	0	1
1	0	1	0	-	0	0	1	1	0	0	1	0	1
1	0	1	1	1	1	0	0	0	1	0	-	0	0
1	1	0	0	-	0	1	1	0	-	0	1	-	1
1	1	0	1	0	1	1	0	0	0	-	0	0	1
1	1	1	0	0	0	0	1	0	-	0	1	1	-
1	1	1	1	1	-	1	-	1	0	-	1	0	0

**Group 3 – Person 15**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	-	-	0	0	0	0	0	0	1	1
0	0	0	1	1	0	0	0	-	1	1	0	0	0
0	0	1	0	1	0	0	0	1	0	0	-	1	1
0	0	1	1	1	0	-	-	1	1	1	-	1	0
0	1	0	0	0	0	1	-	0	1	1	0	-	0
0	1	0	1	0	0	0	0	0	1	0	1	1	0
0	1	1	0	1	0	1	-	1	1	0	0	-	-
0	1	1	1	-	1	0	1	0	1	0	-	-	1
1	0	0	0	0	0	0	0	1	1	-	1	0	0
1	0	0	1	1	0	1	1	1	1	0	1	0	1
1	0	1	0	1	1	1	0	-	-	0	-	0	1
1	0	1	1	0	1	-	1	1	-	0	0	1	1
1	1	0	0	1	1	0	0	0	1	1	0	-	1
1	1	0	1	1	1	0	1	0	0	0	0	0	-
1	1	1	0	1	0	0	0	1	0	1	0	1	1
1	1	1	1	1	0	-	1	1	0	1	-	1	-

**Group 3 – Person 16**

x				a	b	c	d	e	f	g	h	i	j
x <sub>3</sub>	x <sub>2</sub>	x <sub>1</sub>	x <sub>0</sub>										
0	0	0	0	1	-	1	0	0	1	-	-	0	0
0	0	0	1	1	-	-	-	0	-	0	1	0	0
0	0	1	0	0	1	0	-	0	0	-	0	0	-
0	0	1	1	1	-	1	1	0	0	1	1	0	-
0	1	0	0	1	-	0	-	-	0	-	1	1	0
0	1	0	1	0	1	0	1	-	1	0	1	1	0
0	1	1	0	0	1	1	-	0	-	0	0	0	0
0	1	1	1	-	-	0	0	-	-	1	0	0	0
1	0	0	0	0	0	1	1	0	0	1	-	0	1
1	0	0	1	1	1	0	1	-	1	1	0	-	0
1	0	1	0	0	1	0	0	0	0	0	0	0	1
1	0	1	1	1	1	0	1	1	1	0	1	1	1
1	1	0	0	0	1	-	1	0	1	-	-	1	0
1	1	0	1	1	1	1	1	0	-	-	1	0	0
1	1	1	0	1	0	1	0	1	0	1	1	1	0
1	1	1	1	-	1	0	1	-	1	0	1	0	1