On the Subject of Ice Cream

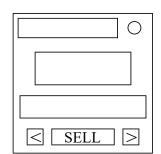*Simon screams for ice cream!*

- The module has a display with a customer's name, and a display with five types of ice cream.
- Using the table, determine the allergies of the customer.
- Go through the first applicable flavour list below and select the first ice cream flavour that the customer is
- not allergic to which is also currently available in the flavour list on the bomb.
- Press the 'sell' button once the correct ice cream flavour is selected. Repeat for all three customers.
- Note that the ice cream parlour is not open all day! Only sell ice cream on even-numbered minutes! Selling ice cream on an odd-numbered minute causes a strike.

Recipes for Ice Cream Flavours:
- **Tutti Frutti:** Vanilla Flavour, Fruit Pieces*.
- **Rocky Road:** Chocolate Flavour, Nuts, Marshmallows.
- **Raspberry Ripple:** Vanilla Flavour, Raspberry Sauce.
- **Double Chocolate:** Chocolate Flavour, Chocolate Chips.
- **Double Strawberry:** Strawberry Flavour, Strawberries.
- **Cookies and Cream:** Vanilla Flavour, Cookies.
- **Neapolitan:** Strawberry Flavour, Chocolate Flavour, Vanilla Flavour.
- **Mint Chocolate Chip:** Mint Flavour, Chocolate Chips.
- **The Classic:** Vanilla Flavour, Chocolate Sauce, Cherry.
- **Vanilla:** Vanilla Flavour.

* Fruit pieces include strawberries, bananas, cherries, and raspberries.

Allergy Converter****:**
- **Chocolate:** 0
- **Strawberry:** 1
- **Raspberry:** 2
- **Nuts:** 3
- **Cookies:** 4
- **Mint:** 5
- **Fruit:** 6*
- **Cherry:** 7
- **Marshmallows:** 8

* Having a fruit allergy implies you are also allergic to strawberries, raspberries, and cherries.

** None of the customers are allergic to vanilla flavouring.

To find out which ingredients the customer is allergic to, use the allergy table.

The rows are the customers, and the columns are the last digit of the serial number.

Allergy Table:

	0-1	2-3	4-5	6-7	8-9
Mike	1-5-0	6-8-3	0-7-1	4-3-2	3-6-1
Tim	0-8-3	2-1-4	4-3-5	2-6-7	1-4-3
Tom	8-4-5	1-6-7	2-5-6	3-7-5	3-6-1
Dave	2-6-7	0-1-4	8-2-3	7-8-1	5-7-3
Adam	3-4-1	3-6-2	0-2-1	2-4-7	8-5-6
Cheryl	1-6-3	7-5-2	1-4-5	4-2-0	3-7-5
Sean	4-6-1	2-3-6	1-5-7	6-8-2	2-7-4
Ashley	6-2-5	4-1-7	0-8-2	1-2-6	3-6-7
Jessica	4-2-6	1-2-3	0-3-4	6-5-0	4-7-8
Taylor	6-3-5	5-1-2	4-2-6	7-1-0	3-7-2
Simon	0-3-5	1-6-4	5-4-8	2-0-7	7-3-6
Sally	4-6-3	1-0-2	6-7-4	2-5-8	0-3-1
Jade	3-7-1	0-8-2	7-1-3	6-7-8	4-5-1
Sam	2-4-1	7-8-0	3-4-6	1-0-3	6-5-2
Gary	1-2-5	6-8-0	3-2-1	7-4-5	1-8-4
Victor	0-3-1	2-5-7	3-4-6	6-7-1	5-3-0
George	8-1-2	6-4-8	0-4-3	1-6-4	3-2-5
Jacob	7-3-2	1-5-6	5-4-7	3-4-0	6-2-1
Pat	5-6-2	1-3-6	3-4-7	2-0-5	8-1-3
Bob	5-6-8	2-1-0	4-8-2	4-2-5	0-5-1

To find out which flavours to sell to the customer first, use the following table of flavour lists.

Read the table in normal reading order (left to right, then top to bottom) and choose the first applicable list.

Flavour List Table:

If there are more lit than unlit indicators:	Otherwise, if there is an empty port plate present on the bomb:
- Cookies and Cream - Neapolitan - Tutti Frutti - The Classic - Rocky Road - Double Chocolate - Mint Chocolate Chip - Double Strawberry - Raspberry Ripple - Vanilla	- Double Chocolate - Mint Chocolate Chip - Neapolitan - Rocky Road - Tutti Frutti - Double Strawberry - Cookies and Cream - Raspberry Ripple - The Classic - Vanilla
Otherwise, if there are 3 or more batteries:	**Otherwise:**
- Neapolitan - Tutti Frutti - Cookies and Cream - Raspberry Ripple - Double Strawberry - Mint Chocolate Chip - Double Chocolate - The Classic - Rocky Road - Vanilla	- Double Strawberry - Cookies and Cream - Rocky Road - The Classic - Neapolitan - Double Chocolate - Tutti Frutti - Raspberry Ripple - Mint Chocolate Chip - Vanilla