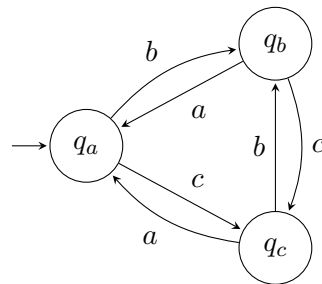


Example 8. Consider the Muller automaton over $\Sigma = \{a, b, c\}$ below with $\mathcal{F} = \{\{q_c\}, \{q_a, q_b\}, \{q_a, q_b, q_c\}\}$.



This automaton accepts the language

$$L = \{\alpha \in \Sigma^\omega \mid a \text{ appears infinitely often in } \alpha \Leftrightarrow b \text{ appears infinitely often in } \alpha\}.$$

An example run of the parity automaton constructed according to Definition 17 is shown below.

α	c	a	c	b	b	a	a	b	b	\dots
	<u>q_a</u>	q_c	q_a	q_c	q_b	<u>q_b</u>	q_a	<u>q_a</u>	q_b	<u>q_b</u>
	q_b	q_a	<u>q_c</u>	<u>q_a</u>	q_c	q_c	q_b	q_b	<u>q_a</u>	q_a
	q_c	<u>q_b</u>	q_b	q_b	<u>q_a</u>	q_a	<u>q_c</u>	q_c	q_c	q_c
hit	1	3	2	2	3	1	3	1	2	1
color	1	6	3	3	6	1	6	1	4	1

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