

1. DRAW A GRAPHICAL REPRESENTATION OF A TURING MACHINE THAT ACCEPTS THE LANGUAGE $\{a^n b^n c^n \mid n \geq 1\}$

$$L = \{a^n b^n c^n \mid n \geq 1\}$$

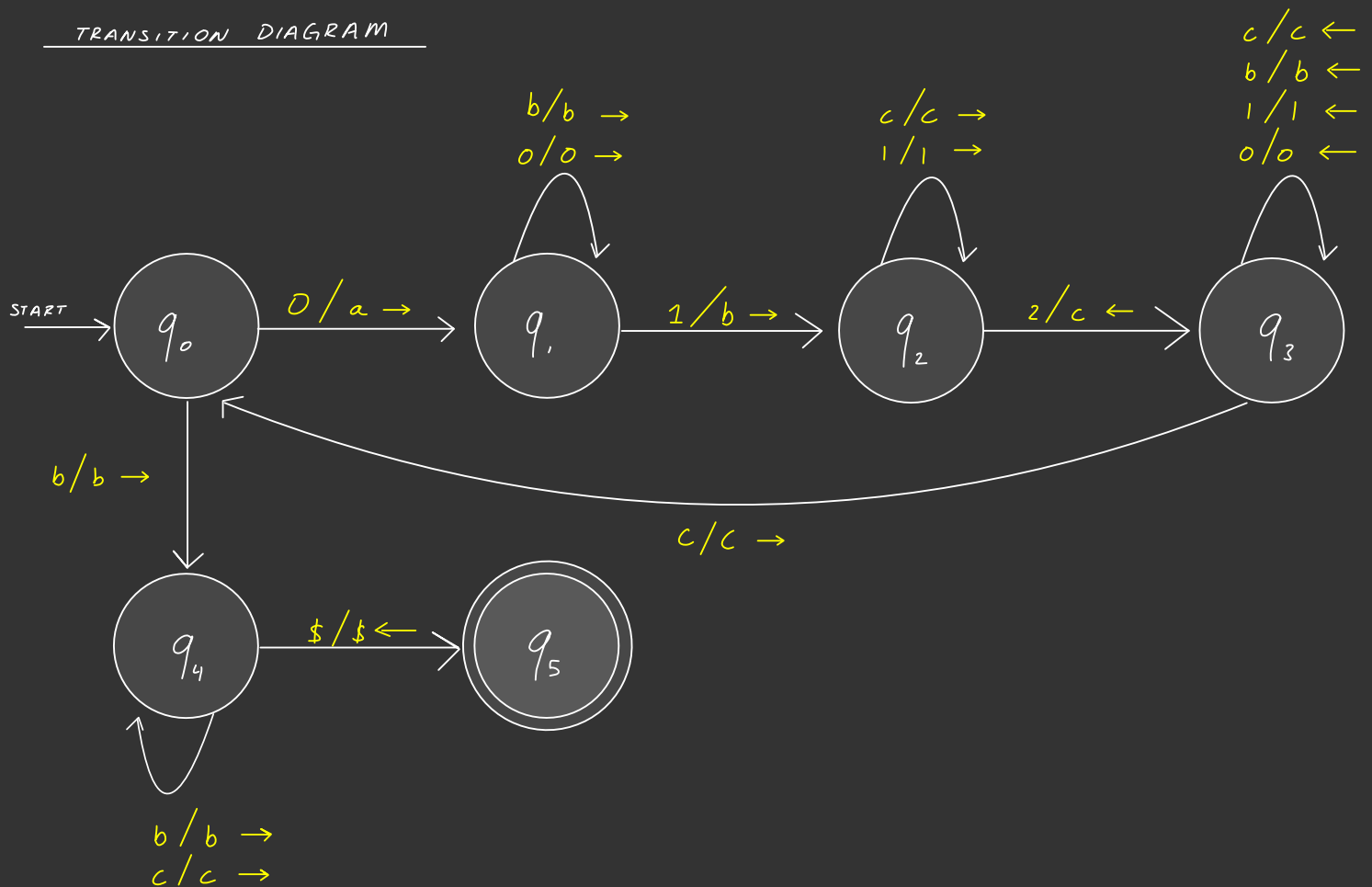
L REPRESENTS A KIND OF LANGUAGE WHERE WE USE ONLY 3 CHARS a, b, c

PROPERTIES OF L

THE BEGINNING OF THE LANGUAGE HAS SOME NUMBER OF a s FOLLOWED BY AN EQUAL NUMBER OF b s, FOLLOWED BY AN EQUAL NUMBER OF c s, ALL OF WHICH HAVE TO HAVE AT LEAST ONE OR MORE INSTANCES.

\forall STR WITHIN THAT CRITERION CAN BE ACCEPTED BY THIS LANGUAGE

TRANSITION DIAGRAM



TM THAT ACCEPTS THE STR IN THE FORM $a^n b^n c^n$