2.1.1
Regular Languages: Review questions

Review questions

1. $L_1 \subseteq \{0, 1\}^*$ be a finite language. L_1 is a set with finite number of strings. T/F?

2. $L_2 = \{0^i \mid i = 0, 1, \ldots, \infty\}$. The language L_2 is regular. T/F?

3. $L_3 = \{0^{2i} \mid i = 0, 1, \ldots, \infty\}$. The language L_3 is regular. T/F?

4. $L_4 = \{0^{17i} \mid i = 0, 1, \ldots, \infty\}$. The language L_4 is regular. T/F?

5. $L_5 = \{0^i \mid i \text{ is } \textbf{not} \text{ divisible by } 17\}$. L_5 is regular. T/F?

6. $L_6 = \{0^i \mid i \text{ is divisible by } 2, 3, \text{ or } 5\}$. L_6 is regular. T/F?

7. $L_7 = \{0^i \mid i \text{ is divisible by } 2, 3, \text{ and } 5\}$. L_7 is regular. T/F?

8. $L_8 = \{0^i \mid i \text{ is divisible by } 2, 3, \text{ but not } 5\}$. L_8 is regular. T/F?

9. $L_9 = \{0^i 1^i \mid i \text{ is divisible by } 2, 3, \text{ but not } 5\}$. L_9 is regular. T/F?

10. $L_{10} = \{w \in \{0, 1\}^* \mid w \text{ has at most } 374 \text{ 1s}\}$. L_{10} is regular. T/F?

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THE END

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