

DFA

Due Sep 21 by 11:59pm **Points** 40 **Submitting** a file upload
Available Sep 14 at 12am - Sep 21 at 11:59pm

This assignment was locked Sep 21 at 11:59pm.

This assignment covers designing DFA's

Some of the questions might be challenging. Please review the covered materials before doing the assignment.

Design a DFA for each of the following languages

1. Design a DFA for the language over the alphabet $\{a, b\}$ for all the strings with at least two occurrences of ba . The two occurrences can be anywhere in the string
2. Design a DFA over $\{0,1\}$ for all the Strings with exactly one 1 and at least one 0.
3. Design a language L over $\{a,b\}$ for all the strings starting with ab
4. Design a DFA over $\{0,1\}$ for all the strings that begins with 0000 or ends with 1111
5. Design a DFA over $\{0,1\}$ for all the strings that starts with 1 and ends with zero
6. Design a DFA over $\{0,1\}$ for all the strings ending with 100
7. Design a DFA for all the Strings where the second to the last symbol of the word is a 'b'. Therefore, all the strings are ending with bb or ba
8. Design a DFA set of all the strings over $\{a, b\}$ for all the string that the third symbol to the right is an 'a', meaning all the strings must end in the one of the following: abb , aaa , aab , aba