Ex. 1

Let $\Sigma = \{a, b, c\}$. Give deterministic complete finite state automata recognizing each of the following languages:

1. The set of words whose length is even.
2. The set of words where the number of occurrences of b is divisible by 3.
3. The set of words ending with b.
4. The set of words not ending with b.
5. The set of non empty words not ending with b.
6. The set of words containing at least a b.
7. The set of words containing at most a b.
8. The set of words containing exactly a b.