Question 1

Let $\Sigma = \{a, \ldots, z\} \cup \{\#\}$.

Construct an nfa that accepts the strings $w \in \Sigma^*$ such that

(a) $w = w_1, \ldots, w_n$, where $n \geq 1$ and for $1 \leq i \leq n$, $w_i \in \{taksim, sariyer, ve, -ler, -ki, -n, -de, -in, \#\}$.

(b) each w is a Turkish noun phrase with the following property: when you insert w into the slot '__beni çok korkutuyor', you get a grammatical sentence, where w is understood as the subject of *korkutmak*, the entity or entities that frighten the speaker of the sentence. The sentence may be pragmatically deviant, though. E.g. an acceptable w would be *sariyerler#ve#taksiminki* or, say, *taksim#ve#taksim*.

Please remember that you are allowed to read strings in a single transition of your nfa.