获得的答案 **返回**

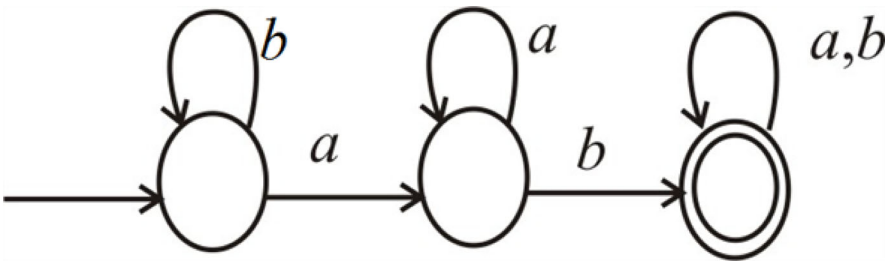
(a) The language is

$\overline{L} = \{w \mid w$ does not contain the substring *ab*$\}$

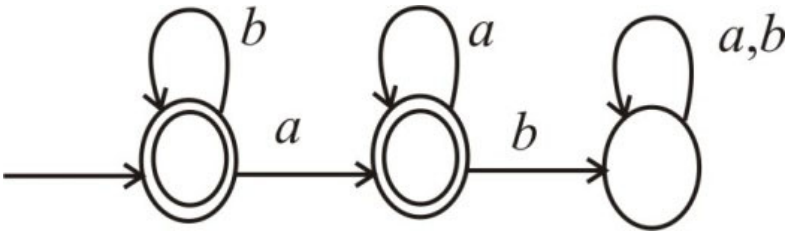
$\overline{L}$ is the complement of a simpler language *L*.

Then the simple language is $L = \{w \mid w$ contain the substring *ab*$\}$

DFA recognizes the language *L* is a follows:



DFA that recognizes the language $\overline{L}$ is as follows:



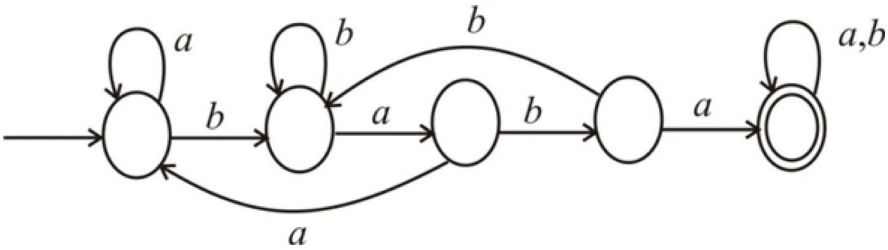
(b) The language is

$\overline{L} = \{w \mid w$ does not contain the substring *baba*$\}$

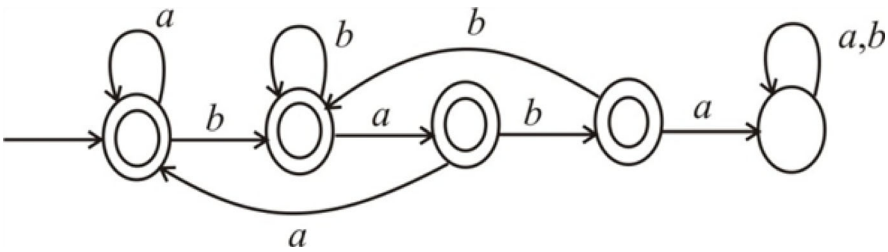
$\overline{L}$ is the complement of a simpler language *L*.

Then the simple language is $L = \{w \mid w$ contain the substring *baba*$\}$

DFA that recognizes the language *L* is as follows:



DFA that recognizes the language *L* is as follows:



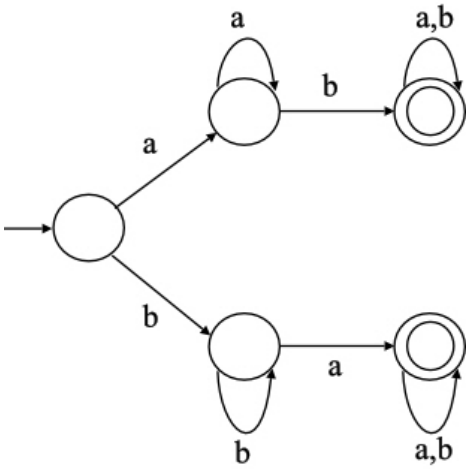
(c) The language is

$\overline{L} = \{w \mid w$ contains neither the substrings *ab* nor *ba*$\}$

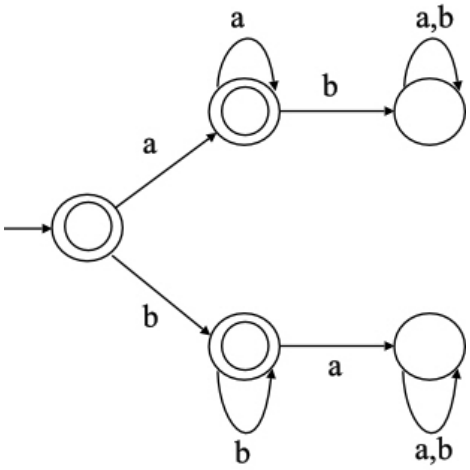
$\overline{L}$ is the complement of a simpler language *L*.

Then the simple language is $L = \{w \mid w$ contains either the substring *ab* or *ba*$\}$

DFA that recognizes the language *L* is as follows



DFA that recognizes the language $\overline{L}$ is as follows:



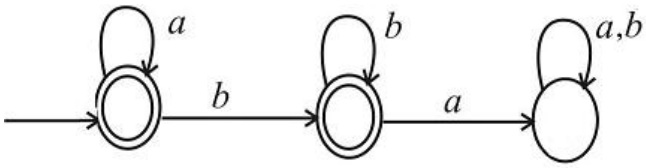
(d) The language is

$\overline{L} = \{w \mid w$ is any string not in $a^*b^*\}$

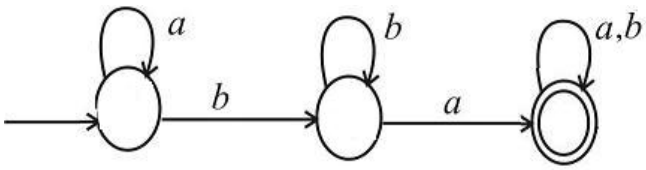
$\overline{L}$ is the complement of a simpler language *L*.

Then the simple language is $L = \{w \mid w$ is any string in $a^*b^*\}$

DFA that recognizes the language *L* as follows



DFA that recognizes the language $\overline{L}$ is as follows:



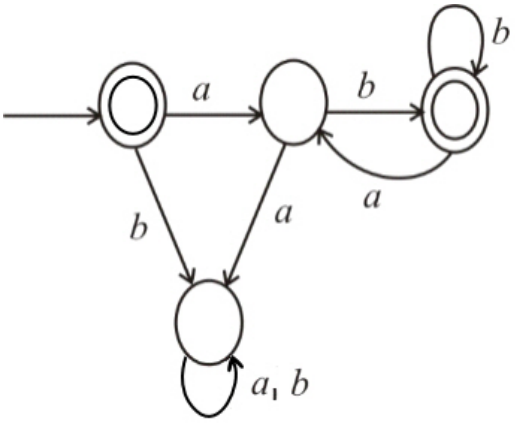
(e) The language is

$\overline{L} = \{w \mid w$ is any string not in $\left(ab^+\right)^*\}$

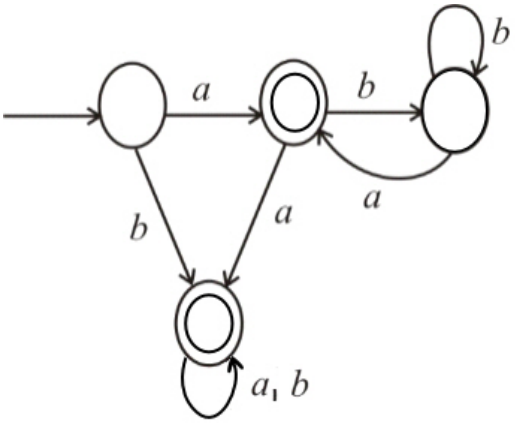
$\overline{L}$ is the complement of a simpler language *L*.

Then the simple language is $L = \{w \mid w$ is any string in $\left(ab^+\right)^*\}$

DFA that recognizes the language *L* is as follows:



DFA that recognizes the language $\overline{L}$ is as follows:



(f)

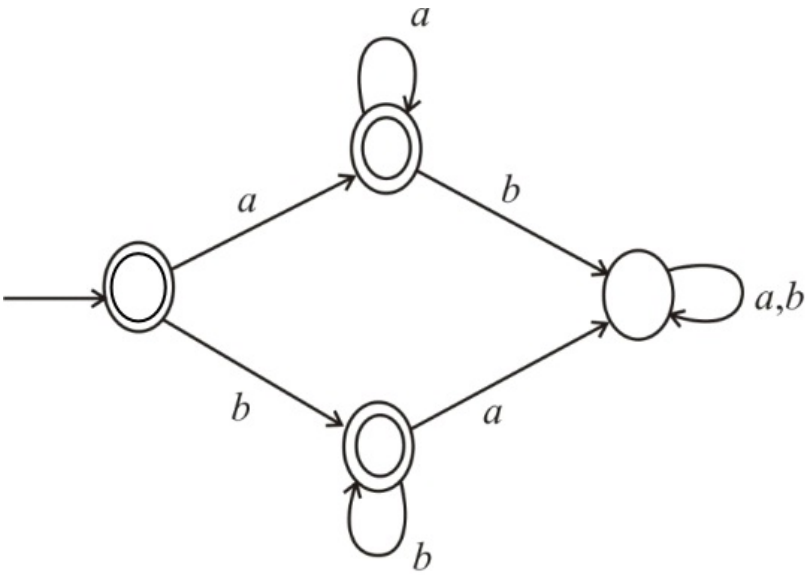
The language is

$\overline{L} = \{w \mid w$ is any string not in $a^* \cup b^*\}$

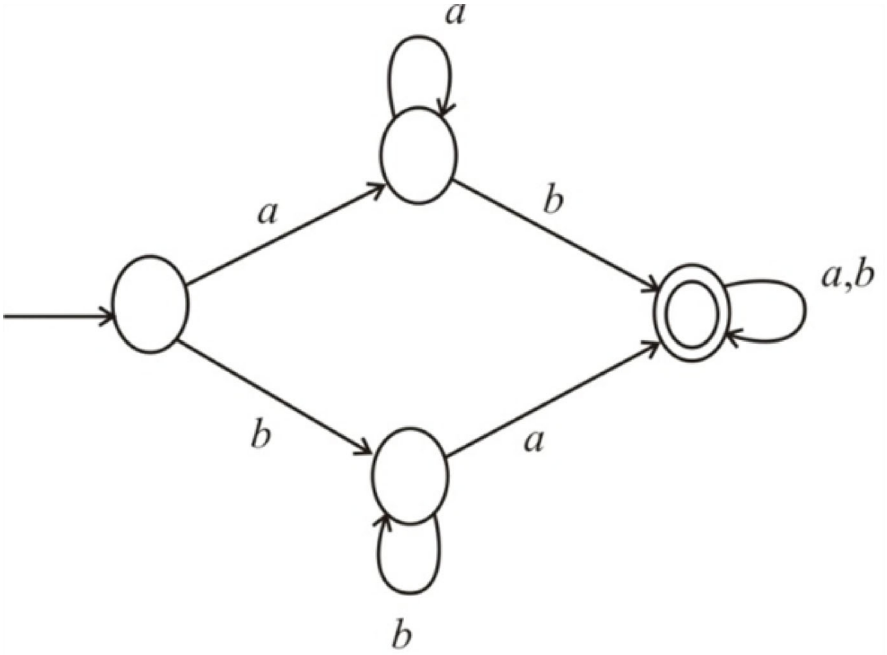
$\overline{L}$ is the complement of a simpler language *L*.

Then the simple language is $L = \{w \mid w$ is any string in $a^* \cup b^*\}$

DFA that recognizes the language *L* is as follows:



DFA that recognizes the language $\overline{L}$ is as follows:



(g) The language is

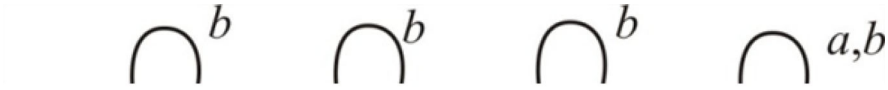
$\overline{L} = \{w \mid w$ is any string that doesn't contain exactly two a's$\}$

$\overline{L}$ is the complement of a simpler language *L*.

Then the simple language is $L = \{w \mid w$ is any string contain exactly two *a*'s$\}$

DFA that recognizes *L* is as follows:

DFA that recognizes $\overline{L}$ is as follows:



(h) The language is

{ is any string except *a* and *b*}

is the complement of a simpler language *L*.

Then the simple language is { is *a* and *b*}

DFA that recognizes *L* is as follows:

DFA that recognizes is as follows: