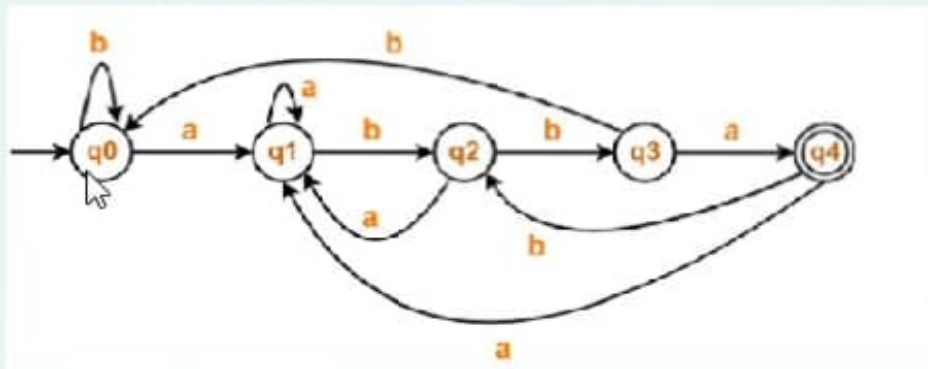


What is the string generated from the following DFA?



- ☐ a. baabbb
- ☐ b. bbabbab
- ☒ c. aaabbba
- ☐ d. ababababb

What is the following of W?

$S \rightarrow tWBCD$

$W \rightarrow qt / t$

$B \rightarrow r / \epsilon$

$C \rightarrow q / \epsilon$

$D \rightarrow p$

- ☐ a. $\{r, q\}$
- ☐ b. $\{q, r, t\}$
- ☐ c. $\{r, q, \$\}$
- ☒ d. $\{r, q, p\}$

[Clear my choice](#)

What is the First of A?

$A \rightarrow b a / X Y$

$X \rightarrow g / \epsilon$

$Y \rightarrow h / \epsilon$

- ☒ a. $\{b, g, \epsilon\}$
- ☐ b. $\{b, a, g, h, \epsilon\}$
- ☐ c. $\{b, g, h, \epsilon\}$

[Clear my choice](#)

Show that the grammar G with production is ambiguous or not: string = abababa

$$\begin{aligned} S &\rightarrow aB \mid ab, \\ A &\rightarrow aAB \mid a, \\ B &\rightarrow ABb \mid b \end{aligned}$$

- ☒ a. ambiguous
- ☐ b. unambiguous

The number of tokens in following program?

```
# define M 100
int main ( )
{
// declare variables
int n = 2020;
return n % M;
}
```

☐ a. 17

☐ b. 20

☐ c. 19

☒ d. 16

check ambiguity of this string $\bar{a}abbccdd$

$$S \rightarrow AB \mid C$$

$$A \rightarrow aAb \mid ab$$

$$B \rightarrow cBd \mid cd$$

$$C \rightarrow aCd \mid aDd$$

$$D \rightarrow bDc \mid bc$$

- ☐ a. unambiguous
- ☒ b. ambiguous

Describe language denoted by the following regular expression

$(00|11)^*(01|1)^*$

- ☐ a. $\{\epsilon, 00, 11, 01, 1, 0011, 0110, \dots\}$
- ☐ b. $\{\epsilon, 00, 11, 01, 1, 0011, 0110, \dots\}$
- ☒ c. $\{\epsilon, 00, 11, 01, 1, 00011, 011, \dots\}$

Check whether the given grammar is ambiguous or not- string = aabbbcc

$T \rightarrow R$

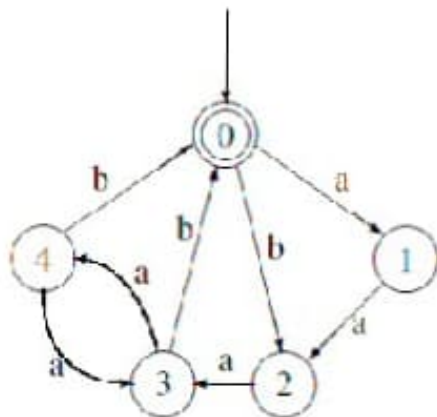
$T \rightarrow aTc$

$R \rightarrow \epsilon$

$R \rightarrow bR$

- ☒ a. ambiguous
- ☐ b. unambiguous

what is the output after minimizing the following DFA



- ☐ a. $\{1,2\}\{3,4\}\{0\}$
- ☒ b. $\{1\}\{2,3,4\}\{0\}$
- ☐ c. $\{1,2,3\}\{4\}\{0\}$
- ☐ d. $\{2,3,4\}\{1\}\{0\}$
- ☐ e. $\{1,3,4\}\{2\}\{0\}$

How many numbers of tokens in this statement_____.

```
printf("h= %d, &h = %x", h, &h);
```

- ☒ a. 12
- ☐ b. 10
- ☐ c. non of these
- ☐ d. 21
- ☐ e. 11

In Compiler lexical analyzer is used for?

- ☐ a. removing white space
- ☐ b. breaking the syntaxes in the set of tokens
- ☐ c. removing comments
- ☒ d. All of the mentioned

[Clear my choice](#)

Finish attempt ...

consider the following grammar

$s \rightarrow AB$

$A \rightarrow 0A112$

$B \rightarrow 1B13A$

which of the following grammar generated by the grammar

- ☐ a. 0211300021
- ☒ b. 002111300211
- ☐ c. 02130021
- ☐ d. 002131021

[Clear my choice](#)

Find First and Follow of N and B

$N \rightarrow AB$

$N \rightarrow BA$

$A \rightarrow a$

$A \rightarrow CAC$

$B \rightarrow b$

$B \rightarrow CDC$

$C \rightarrow a$

$C \rightarrow b$

- ☒ a. First and follow of N { a, b }, { \$ } First and Follow of B { a, b }, { a, b, \$ }
- ☐ b. First and follow of N { a }, { \$ } First and Follow of B { a, b }, { a, b, \$ }
- ☐ c. First and follow of N { a }, { \$ } First and Follow of B { a }, { a, b, \$ }
- ☐ d. First and follow of N { a, b }, { \$ } First and Follow of B { a }, { a, b, \$ }

[Clear my choice](#)

Which of the following parser has no two adjacent non-terminals?

- ☐ a. LR
- ☐ b. LL
- ☒ c. operator precedence
- ☐ d. Back Tracking

[Clear my choice](#)

Eliminate left recursion

$H \rightarrow HaHbH|ab$

- ☐ a. $H \rightarrow aHbA$, $A \rightarrow aHbHA|\epsilon$
- ☐ b. $H \rightarrow abH$, $A \rightarrow aHbHA|\epsilon$
- ☒ c. $H \rightarrow abA$, $A \rightarrow aHbHA|\epsilon$

Clear my choice

which of the following grammar is free from left recursion

1. $S \rightarrow AB$

2. $S \rightarrow Ab \mid Bb \mid c$

3. $S \rightarrow Aa \mid B$

4. $S \rightarrow Aa \mid Bb \mid c$

$A \rightarrow Aa \mid b$

$A \rightarrow Bd \mid \epsilon$

$A \rightarrow Bb \mid Sc \mid \epsilon$

$A \rightarrow Bd \mid \epsilon$

$B \rightarrow c$

$B \rightarrow e$

$B \rightarrow d$

$B \rightarrow Ae \mid \epsilon$

☐ a. 4

☒ b. 2

☐ c. 3

☐ d. 1

[Clear my choice](#)