

1. Regular expression how many operation?

=The three basic operations are Union, concatenation, kleen closure.

2. What is Lookahead?

= lookahead token means that you only have to read the next one character from the current character you are reading.

3. Regular expression in a general how many operation?

= matching, searching, transforming

4. What regular expression?

= A regular expression is a set of patterns that can match a character or string.

Each regular expression r denotes a language $L(r)$, which is also defined recursively from the languages denoted by r 's sub expressions.

regular expression rule:

E is a regular expression, and $L(E)$ is $\{\epsilon\}$, that is, the language whose sole member is the empty string.

If a is a symbol in E , then a is a regular expression, and $L(a) = \{a\}$, that is, the language with one string, of length one, with a in its one position. Here italics is used for symbols, and boldface for their corresponding regular expressionn.

5. What is Dfa?

= A finite automata that contains 5 tuples there are Q , σ , δ , q not, F .

6. What is Nfa?

= NFA stands for non-deterministic finite automata. The finite automata are called NFA when there exist many paths for specific input from the current state to the next state.

7. Nfa vs Dfa?

= DFA requires more space // NFA requires less space then DFA.

8. What is first (A)?

= First (A) contains all terminals present in first place of every string derived by A.

9. What is follow (A)?

= Follow (A) contains set of all terminals present immediate in right of A. Follow start with \$ symbol.

10. What is deterministic?

= In deterministic algorithm, for a given particular input, the computer will always produce the same output going through the same states

11. What is non- deterministic?

= non-deterministic algorithm, for the same input, the compiler may produce different output in different runs.

12. Set vs Tuple?

= Tuple is a collection of values separated by comma and enclosed in parenthesis.

Set is an unordered collection of distinct immutable objects. A set contains unique elements. Although sets are mutable, the elements of sets must be immutable.

13. What is Epsilon-transaction ?

= A transaction without input.

14. Nfa Epsilon-transaction?

= The NFA with epsilon-transition is a finite state machine in which the transition from one state to another state is allowed without any input symbol.

15. Why Nfa Epsilon-transaction use?

= In general, epsilon-transitions are used when they are convenient.

16. What is grammar?

= It is a finite set of formal rules for generating syntactically correct sentences or meaningful correct sentences.

17. What is cfg?

= Context-free grammars (CFGs) are used to describe context-free languages. A context-free grammar is a set of recursive rules used to generate patterns of strings.

Context-free grammar a left side a thake single variable.

18. What is parsing?

= It a process of describing string from a given grammer

It check weather the grammar follow right rules or not

19. Types of parsing ?

= 1. Top-down: constructs a parse tree from root to leaves .it is recursive ->backtracking, non – backtracking (LL1)

2. Bottom-up: constructs a parse tree from leaves to root

20. Parsing table collects?

= A Parsing table collects information from FIRST and FOLLOW set.

21. What is parsing table?

= A Parsing table provides a direction/predictive guideline for generating a parse tree from a grammar.

22. LL (1) work?

= Make the grammar suitable for top-down parser. By performing the elimination of left recursion. And by performing left factoring. Find the FIRST and FOLLOW of the variables. Create Parsing table based on the information from FIRST and FOLLOW sets.

23. LL (1) constraction rule total (5)?

1 From a Grammar Find out First and Follow.

2. If first of right hand side terminal, directly place in table.

3. If we see epsilon in first of right hand side, place the production in follow also.

24. Stack Moment?

1. With the help of FIRST, FOLLOW and associated Parse Table predictive parser makes moves.

2. With a certain input string the predictive parser makes the sequence of moves.

25. What is predictive parser?

= A predictive parser is a recursive descent parser with no backtracking or backup.