

Q)Which of the following languages is the one that is interpreted most of the times.--> **Lisp**

Q)The most appropriate reason for preferring an interpreter to a compiler is_____.--> **It takes less time to execute**

Q)The software that prepares a single executable file from several files of relocatable machine code during program translation is_____.--> **Linker/Loader**

Q)Component of a compiler that allows the phases to process in interleaved manner is_____.--> **Pass**

Q)File inclusion, Macro expansion is the responsibility of _____--> **Preprocessor**

Q)The Front End of the compiler does not contain the following.--> **Code Generator**

Q)Compiler is a _____--> **Software**

Q)Which of the following translator produces the relocatable machine code as output in a typical language processing system?--> **Assembler**

Q)A _____ of the compiler(translator) performs one complete scan of the source program in each translation step.--> **Pass**

Q)The Analysis and Synthesis model of a compiler contains _____ phases.--> **6**

Q)In compiler design, a logically cohesive set of operations that takes one representation of the source program as input and converts it into its equivalent other representation is called _____--> **Phase**

Q)Which of the following translator converts assembly language programs into its equivalent object program.--> **Assembler**

Q)The input to_____is an assembly language program.--> **Assembler**

Q)A _____is a program that reads a program written in one language (source) and translates it into its equivalent (target) language.--> **Translator**

Q)Pick the odd man out from the following.--> **Lisp**

Q)_____ of the following is a computer languages that is both compiled and interpreted.--> **Java**

Q)LEX stands for _____--> **Lexical Analyzer Generator**

Q)During the Lexical Analysis, the original string in the source program that matches with the pattern is called a _____.--> **Lexeme**

Q)_____ is not related to synthesis phases of compiler.--> **Lexical analysis**

Q)Lexical analyzer uses _____ to recognize the tokens.--> **Finite Automata**

Q)What is the output of the Lexical Analysis phase in a compiler?--> **A sequence of lexemes**

Q)Which of the following is used as the token specifier in the Scanner?--> **Regular Expressions**

Q)Which of the following is not a part of the Front end of the compiler?--> **Code generation**

Q)The phase that is not related to analyses part of the Compiler is_____.--> **Code optimization**

Q)Removing the comments, white space and unnecessary information from the source program is done by _____ phase.--> **Lexical analysis**

Q)In Lexical Phase design, Transition diagrams use _____ notation to represent a state.--> **Circles**

Q)Type Checking is the done by _____ phase in compilation.--> **Syntax Analysis**

Q)The functionality of the _____ phase is largely independent of the Target machine language.--> **Semantic Analysis**

Q)What is the Output of the Parsing phase in compilation?--> **Syntax or Parse Tree**

Q)Semantic analysis is related to _____ phase of the compiler--> **Synthesis**

Q)Syntax Analysis is the _____ phase of the compiler.--> **2**

Q)Parser checks the ----- of programs--> **Syntax**

Q)A Lex program consists of three parts namely _____, _____ and _____--> **Declarations, Translation rules, Auxiliary procedures**

Q)Pick the odd man out of the following.--> **YACC**

Q)Which of the following is not an intermediate code form?--> **Parse Tree**

Q)_____ is sequence of characters having a collective meaning and is generated by Lexical Analyzer.--> **Token**

Q)_____ phase of a compiler is optional in compiler construction.--> **Intermediate Code Generation**

Q)Symbol Table is a data structure that stores _____.--> **Data & Attributes**

Q)A compiler which runs on one machine and produce target code for another machine is called _____.--> **Cross compiler**

Q)Which of the following is called Source and Target language independent phase?--> **Intermediate Code Generation**

Q)A FSM that allows zero, one, or more transitions out of state labeled an input symbol is _____.--> **NFA**

Q)The FSM which takes more space but faster processing of input is _____.--> **DFA**

Q)Which of the following regular expression can be used to search for all C file in a directory?--> ***.C**

Q)_____ constructs the desired target program from the intermediate representation.--> **Code generator**

Q)Using the facilities offered by a language to compiler itself is called _____.--> **Bootstrapping**

Q)Formally a finite automata is represented as a _____ tuple.--> **5**

Q)Word level syntax checking during language translation is performed by _____ phase.--> **Lexical Analyzer**

Q)The component of a compiler that deals with the syntactic errors is _____.--> **Parser**

Q)Which of the following is the specific output of Syntax Analysis phase?--> **Parse tree**

Q)Pick the odd man out from the following.--> **Parse tree**

Q)A top down parser constructs the parse tree in _____ order.--> **top down**

Q)BNF stands for _____.--> **Backus Naur Form**

Q)A grammar will be meaningless if _____.--> **If the left hand side of a production is a single terminal**

Q)In a _____, each internal node represents an operator.--> **Syntax Tree**

Q)In a Parse tree the external nodes represents the _____ of the language.--> **Tokens or terminals or ϵ**

Q)What is the maximum value for k in LL(k) in the context of high level language translation by top down parsers.--> **No limit**

Q)_____ is a way of showing how an input sentence can be recognized with a grammar.--> **Derivation**

Q)Which of the following is the most general phrase structured grammar?--> **Context free**

Q)The input to syntax analysis phase of the compiler is _____.--> **A sequence of tokens**

Q)A Top down parser scans the input (token string) in _____ order and constructs its equivalent parse tree in top down order.--> **Left to right**

Q)A top down parser generates a _____ for the input string.--> **Left most derivation**

- Q)A bottom up parser constructs the parse tree in _____ order.--> **From leaves to root**
- Q)As a Dictionary is for a Language, _____ is must for the Syntax Analyzer of compiler.--> **CFG**
- Q)Syntax analyzer phase of a compiler is also called as _____.--> **Parser**
- Q)Which of the following is the most powerful parser?--> **Canonical LR**
- Q)A grammar is called ambiguous if produces _____ for an input string.--> **More than one Parse tree**
- Q)The General form of left recursive grammar is _____.--> **It contains at least one production of the form $A \rightarrow A\alpha$**
- Q)YACC Stands for _____.--> **Yet another Compiler Compiler**
- Q)The action of parsing the source program into the proper syntactic classes is known as _____.--> **Syntax analyzer**
- Q)In LL (1) parsing the second L refers to _____.--> **Left most derivation**
- Q)What does the k denotes in LL(k) grammar?--> **No. of look a head symbols needed to take parsing action decisions**
- Q)Which of the following parsers uses Backtracking technique during input processing?--> **Recursive Descent**
- Q)FIRST(terminal) is always a _____.--> **Terminal**
- Q)FIRST(X) of a grammar symbol X denotes a set of _____ symbols with which the strings from X begins.--> **Terminal**
- Q)A Left Recursive grammar causes the top down parser to _____ on the input.--> **Go into infinite loop**
- Q)Which of the following is the tool used by the Syntax Analyzer to specify the syntax of statements.--> **CFG**
- Q)Recursive descent parser uses _____ procedures to process the input.--> **A set of Recursive**
- Q)A Predictive parser can never use the _____ grammar for accepting the strings.--> **Ambiguous**
- Q)The empty cells in an LL(1) or Predictive Parsing table denotes _____.--> **Error Action**
- Q)FOLLOW () is applicable for _____.--> **Only non terminals**
- Q)FOLLOW(A) of a Non terminal symbol A denotes a set of _____ symbols that follow the strings derived by the grammar symbol A.--> **Terminal**
- Q)FOLLOW(S) contains _____ where S is the start symbol of the grammar.--> **\$**
- Q)The class of errors reported by the Syntax Analyzer are _____.--> **Syntactic**
- Q)Let $G = (V, T, P, S)$ be a CFG for which an LL(1) parser is constructed. The number of columns in corresponding LL(1) parsing table is _____.--> **No of Terminals +1**
- Q)The most applicable attribute to the following grammar is: $E \rightarrow E+T / T$, $T \rightarrow T * F / F$, $F \rightarrow (E) / I$, $I \rightarrow [a-z] / [0-9]$.--> **It is left recursive**
- Q)Lexeme is a _____ in the source program that when matched with the Pattern, the Lexical Analyzer generates a token.--> **Sequence of characters**
- Q)The left recursive productions $A \rightarrow A\alpha_1 / \beta$ can be replaced by the following left recursion free statements.--> **$A \rightarrow \beta A$, $A \rightarrow \alpha A / \epsilon$**
- Q)The grammar $S \rightarrow AB / AS$, $A \rightarrow SB / aB / a$, $B \rightarrow bA / bc$ is _____ grammar.--> **Inherently Left Recursive**
- Q)A grammar with common prefixes of alternates causes the top down parser to get in to _____ mode.--> **Back tracking**
- Q)Which of the following is not a bottom up parser _____ ?--> **Predictive parser**

Q)Shift reduce parsers are_____ .--> **Bottom up parsers**

Q)_____ a Regular language recognizer that takes less space and processes the input more faster than other counterparts.--> **DFA**

Q)Which of the following technique that a Scanner uses to reduce the input scanning time.--> **Input Buffering**

Q)In LR(1) Parsing, _____ means the construction of a Reverse Rightmost Derivation for the input string.--> **R**

Q)Which of the following is the most powerful bottom up parser _____ --> **Canonical LR**

Q)In bottom up parsing techniques, the shift operation always _____.--> **Pushes a token and also advances the input**

Q)In bottom up parsing shift operation performs _____.--> **Only Push**

Q)In bottom up parsing reduce operation performs _____.--> **Only Push**

Q)In LR(1) _____ means the input is read from left to right .--> **L**

Q)Which one of the following is True.--> **LALR(1) requires less space compare with CLR(1)**

Q)The parser generator YACC builds up _____ parsing table.--> **LALR**

Q)Syntax analyzers use _____ as the syntax specification tool.--> **CFGs**

Q)YACC specification program consists of _____ sections.--> **3**

Q)_____ is the process of replacing a right hand side on the stack with the matching left hand side.--> **Handle**

Q)If w is a string of terminals and A, B are two non-terminals, then which of the following are right-linear grammars?--> **$A \rightarrow wB / w$**

Q)CFG can be recognized by _____.--> **Push-down automata**

Q)Cross compiler is a compiler--> **That runs on one machine and produces object code for another machine**

Q)The CFGs with _____ attributes cannot be handled by the top down parsers because they force them to get into infinite loop.--> **Left recursion**

Q)Let G be an SLR and LALR grammar. Then which of the following relationship between the number states of the corresponding parsers is correct.--> **No of states of SLR = No of states of LALR**

Q)Which of the following relation among the grammars is true as per their language descriptive power is concerned?--> **$LL(k) \leq LR(k) \leq CFG$**

Q)_____ Parser takes parsing action decisions unambiguously by knowing the top of the stack and next input symbol.--> **Predictive**

Q)Consider the following C code fragment. What could be the kind of error a C compiler reports in line3? `int main(void) { // line1 int I,N=10; // line2 For(i=0; i<N; i++); // line3 ..}`--> **Syntax error**

Q)Which of the following statements is false?--> **An unambiguous grammar has same left most and right most derivation for an input string.**

Q)Consider a program P which contains two source modules M1 and M2 contained in two different files. If M1 contains a reference to a function defined in M1, the reference will be resolved at _____ .--> **Link Time**

Q)Shift Reduce Parsers are--> **Bottom UP**

Q)Which of the following is true in case of the grammar $G: S \rightarrow SS, S \rightarrow (S), S \rightarrow (), S \rightarrow t$ --> **G is ambiguous**

Q)The type of conflicts that may arise during L(0) Parsing are _____.--> **Shift-Reduce & Reduce-Reduce**

Q)Predictive Parser can be--> **Recursive**

Q) Consider the grammar $S \rightarrow (S) \mid a$. Let the number of states in SLR(1), LR(1) and LALR(1) parsers for the grammar be n_1 , n_2 and n_3 respectively. The following relationship holds good. $\rightarrow n_1 = n_3 < n_2$

Q) Given the following expression grammar: $E \rightarrow E * T \mid T$, $T \rightarrow T + F \mid F$, $F \rightarrow (E) \mid id$. Which of the following is true? $\rightarrow +$ has higher precedence than $*$

Q) Which of the following suffices to convert an arbitrary CFG to an LL(1) grammar? \rightarrow

Q) Which of the following grammar rules violate the requirements of an operator grammar? P, Q, R are non-terminals, and r, s, t are terminals. (i) $P \rightarrow QR$ (ii) $P \rightarrow QsR$ (iii) $P \rightarrow \epsilon$ (iv) $P \rightarrow Qtr$ \rightarrow (i) and (iii) only

Q) Consider the grammar with non-terminals $N = \{S, C, S'\}$, terminals $T = \{a, b, i, t, e\}$, with S as the start symbol, and the following of rules $S \rightarrow iCtSS' \mid a$, $S' \rightarrow eS \mid \epsilon$, $C \rightarrow b$. Which of the following is true. \rightarrow D. It is not LL(1)

Q) An LALR(1) parser for a grammar can have shift-reduce (S-R) conflicts if and only if \rightarrow The LR(1) parser for G has S-R conflicts

Q) The grammar $S \rightarrow iEtSS' \mid other$, $S \rightarrow eSS' \mid \epsilon$, $E \rightarrow b$ is _____ a grammar. \rightarrow Not LL(1)

Q) In the grammar $E \rightarrow TE'$, $E \rightarrow +TE'$, $T \rightarrow FT'$, $T \rightarrow *FT'$, $F \rightarrow (E) \mid id$ FIRST(E) is same as _____. \rightarrow FIRST(T)

Q) Macro Processors are _____. \rightarrow A kind of translator (compiler)

Q) Advantage of panic mode of error recovery is that \rightarrow It is easy to implement and never gets into infinite loop

Q) In Operator Precedence parsing, precedence relations are defined for _____. \rightarrow Only for a certain pairs of terminals

Q) _____ is called as the graphical representation of a derivation. \rightarrow Parse Tree

Q) A parser with the valid prefix property is advantageous because _____. \rightarrow Limits the erroneous output passed to the next phase

Q) The arcs in the transition diagrams of predictive parser are labeled always with _____. \rightarrow Can be terminals or non terminals

Q) Which of these is not true about Symbol Table? \rightarrow Perform the processing of the assembler directives.

Q) Handle Pruning in bottom up parsing is _____ \rightarrow Locating the handles and reducing them by a left hand side which results in the immediately preceding right sentential form.

Q) In a language L , an identifier is defined as any sequence of letters and digits that starts with a letter. If L denotes letters and D denotes digits, which of the following represents an identifier in L . $\rightarrow L.(LUD)^*$

Q) Let s be a string defined over some alphabet Σ . If $|s| = n$, The number of proper prefixes of s is _____. $\rightarrow n$

Q) Consider the grammar shown below. $S \rightarrow CC$, $C \rightarrow cC \mid d$. The grammar is _____. \rightarrow SLR(1), CLR(1) and LALR(1)

Q) Which of the following describes a handle (as in LR-parsing) appropriately? \rightarrow It is the production P that will be used for reduction in the next step along with a position in the sentential form where the right hand side of the production may be found