Padasalai's Telegram Groups!

(தலைப்பிற்கு கீழே உள்ள லிங்கை கிளிக் செய்து குழுவில் இணையவும்!)

- Padasalai's NEWS - Group
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- Lesson Plan - Group
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CHAPTER – 4

ALGORITHMIC STRATEGIES

1. A _____ is a finite set of instructions to accomplish a particular task.
   a) Array b) Structure c) Algorithm d) Program
2. _____ is a step-by-step procedure for solving a given problem.
   a) Array b) Structure c) Algorithm d) Program
3. An _____ can be implemented in any suitable programming language.
   a) Array b) Structure c) Algorithm d) Program
4. _____ can be developed to store, manipulate and retrieve data from such data structures.
   a) Array b) Structure c) Algorithm d) Program
5. The way of defining an algorithm is called _____
   a) Algorithmic Solution b) Algorithmic Strategy c) Algorithm Analysis d) All the above
6. An _____ that yields expected output for a valid input is called an algorithmic solution
   a) Algorithmic Solution b) Algorithmic Strategy c) Algorithm Analysis d) All the above
7. _____ helps to solve a given problem logically
   a) Array b) Structure c) Algorithm d) Program
8. _____ is an expression of algorithm in a programming language
   a) Array b) Structure c) Algorithm d) Program
9. _____ resembles a pseudo code which can be implemented in any language
   a) Array b) Structure c) Algorithm d) Program
10. _____ is more specific to a programming language
    a) Array b) Structure c) Algorithm d) Program
11. Analysis of algorithms and performance evaluation can be divided into _____ different phases
    a) 3 b) 2 c) 5 d) 4
12. This is a theoretical performance analysis of an algorithm.
    a) Posteriori Testing b) Priori Estimates c) Time Complexity d) Space Complexity
13. Efficiency of an algorithm is measured by assuming the _____ factors.
    a) Posteriori Testing b) Priori Estimates c) Internal d) External
14. _____ is called performance measurement.
    a) Posteriori Testing b) Priori Estimates c) Time Complexity d) Space Complexity
15. In this analysis, actual statistics like running time and required for the algorithm executions are collected.
    a) Time b) Space c) Algorithm d) Array
16. An estimation of the time and space complexities of an algorithm for varying input sizes is called _____.
    a) Algorithmic Solution b) Algorithmic Strategy c) Algorithm Analysis d) All the above
17. _____ is measured by counting the number of key operations like comparisons in the sorting algorithm.
    a) Time b) Space c) Algorithm d) Array
18. _____ is measured by the maximum memory space required by the algorithm.
    a) Time b) Space c) Algorithm d) Array

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19. _____ of an algorithm is the amount of memory required to run to its completion.
    a) Space Complexity b) Time Complexity c) Algorithm Strategy d) Algorithm
20. A _____ is defined as the total space required for storing certain data and variables for an algorithm.
    a) Fixed Part b) Variable Part c) Algorithm d) Array
21. A _____ is defined as the total space required by variables, which sizes depends on the problem and its iteration.
    a) Fixed Part b) Variable Part c) Algorithm d) Array
22. The _____ can be measured based on the usage of different resources.
    a) Algorithmic Solution b) Efficiency of Algorithm c) Time Complexity d) Space
23. A way of designing algorithm is called _____
    a) Algorithmic Solution b) Algorithmic Strategy c) Algorithm Analysis d) All the above
24. _____ is often used to describe the worst-case of an algorithm.
    a) Big O b) Big Omega c) Big P d) Big Theta
25. _____ is the reverse Big O
    a) Big O b) Big Omega c) Big P d) Big Theta
26. If _____ is used to describe the upper bound (worst - case) of an asymptotic function.
    a) Big O b) Big Omega c) Big P d) Big Theta
27. _____ is used to describe the lower bound (best-case).
    a) Big O b) Big Omega c) Big P d) Big Theta
28. _____ also called sequential search
    a) Linear Search b) Binary Search c) Bubble Sort d) Insertion Sort
29. _____ is a sequential method for finding a particular value in a list.
    a) Linear Search b) Binary Search c) Bubble Sort d) Insertion Sort
30. _____ Method checks the search element with each element in sequence until the desired element is found or the list is exhausted.
    a) Linear Search b) Binary Search c) Bubble Sort d) Insertion Sort
31. _____ also called half-interval search algorithm.
    a) Linear Search b) Binary Search c) Bubble Sort d) Insertion Sort
32. _____ finds the position of a search element within a sorted array.
    a) Linear Search b) Binary Search c) Bubble Sort d) Insertion Sort
33. _____ is a simple sorting algorithm.
    a) Linear Search b) Binary Search c) Bubble Sort d) Insertion Sort
34. _____ Algorithm starts at the beginning of the list of values stored in an array.
    a) Linear Search b) Binary Search c) Bubble Sort d) Insertion Sort
35. _____ compares each pair of adjacent elements and swaps them if they are in the unsorted order.
    a) Linear Search b) Binary Search c) Bubble Sort d) Insertion Sort
36. _____ algorithm is also called as a comparison sort
    a) Linear Search b) Binary Search c) Bubble Sort d) Insertion Sort

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37. _____ Algorithm is simple and it is too slow and less efficient when compared to insertion sort and other sorting methods.
    a) Linear Search b) Binary Search c) Bubble Sort d) Insertion Sort
38. The _____ is a simple sorting algorithm that improves on the performance of bubble sort
    a) Linear Search b) Binary Search c) Insertion Sort d) Selection Sort
39. _____ Algorithm will first find the smallest elements in array and swap it with the element in the first position of an array.
    a) Linear Search b) Binary Search c) Insertion Sort d) Selection Sort
40. _____ Algorithm repeatedly selects the next-smallest element and swaps in into the right place for every pass.
    a) Linear Search b) Binary Search c) Insertion Sort d) Selection Sort
41. _____ is a simple sorting algorithm.
    a) Linear Search b) Binary Search c) Insertion Sort d) Selection Sort
42. _____ works by taking elements from the list one by one and inserting then in their correct position in to a new sorted list.
    a) Linear Search b) Binary Search c) Insertion Sort d) Selection Sort
43. _____ algorithm uses n-1 number of passes to get the final sorted list
    a) Linear Search b) Binary Search c) Insertion Sort d) Selection Sort
44. _____ is an algorithmic design method that can be used when the solution to a problem can be viewed as the result of a sequence of decisions.
    a) Dynamic Programming b) Memoization c) Algorithmic Strategy d) Binary Search
45. _____ Approach is similar to divide and conquer.
    a) Dynamic Programming b) Memoization c) Algorithmic Strategy d) Binary Search
46. _____ is used whenever problems can be divided into similar sub-problems.
    a) Dynamic Programming b) Memoization c) Algorithmic Strategy d) Binary Search
47. _____ Approaches are used to find the solution in optimized way.
    a) Dynamic Programming b) Memoization c) Algorithmic Strategy d) Binary Search
48. _____ is an optimization technique used primarily to speed up computer programs
    a) Dynamic Programming b) Memoization c) Algorithmic Strategy d) Binary Search

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CHAPTER – 5

PYTHON VARIABLES AND OPERATORS

1. The language was released in _____.
   a) 1981 b) 1990 c) 1980 d) 1991
2. _____ is a platform independent programming language.
   a) C++ b) Java c) Python d) C
3. _____ is a general purpose programming language which can be used for both scientific and non-scientific programming.
   a) C++ b) Java c) Python d) C
4. The programs written in _____ are easily readable and understandable.
   a) C++ b) Java c) Python d) C
5. In _____, programs can be written in two ways
   a) C++ b) Java c) Python d) C
6. The _____ allows us to write codes in Python command prompt
   a) Interactive Mode b) Script Mode c) Python d) Command
7. _____ programs can be written and stored as separate file
   a) Interactive Mode b) Script Mode c) Python d) Command
8. _____ is used to create and edit python source file.
   a) Interactive Mode b) Script Mode c) Python d) Command
9. In _____ Python code can be directly typed and the interpreter displays the result(s) immediately.
   a) Interactive Mode b) Script Mode c) Python d) Command
10. The _____ indicates that Interpreter is ready to accept instructions.
    a) << b) >> c) <<< d) >>>
11. A _____ is a text file containing the Python statements.
    a) Word b) Notepad c) Script d) Interactive mode
12. _____ Scripts are reusable code.
    a) C++ b) Java c) Python d) C
13. The Command used to create script in Python
    a) File→New b) File→New File c) File→Open d) Edit→New File
14. The Keyboard Shortcut used to create script in Python
    a) Ctrl+M b) Ctrl+N c) Ctrl+O d) Ctrl+P
15. The Command used to save the script in Python is _____
    a) Edit→Save b) File→Save c) File→Saveas d) View→Save
16. The Extension of Python is _____
    a) .pu b) .pt c) .py d) .ph
17. The Command used to execute in Python Script is _____
    a) Run→Run b) Run→Run Module c) Run→Execute d) Execute→File
18. The Keyboard Shortcut used to execute in Python Script is _____
    a) F4 b) F5 c) F3 d) F2
19. The _____ function helps to enter data at run time by the user
    a) print( ) b) input( ) c) print d) input

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20. _____ is used to display the result of the program on the screen after execution.
a) print( ) b) input( ) c) print d) input

21. The _____ function is used to display result on the screen
a) print( ) b) input( ) c) print d) input

22. The _____ evaluates the expression before printing it on the monitor.
a) print( ) b) input( ) c) print d) input

23. _____ is used as a separator in print ( ) to print more than one item.
a) . (dot) b) , (comma) c) : (colon) d) semicolon(;)

24. _____ Function is used to accept data as input at run time.
a) print( ) b) input( ) c) print d) input

25. _____ string in the syntax is a statement or message to the user, to know what input can be given.
a) Key b) Prompt c) Point d) Set of

26. The _____ accepts all data as string or characters but not as numbers.
a) print( ) b) input( ) c) print d) input

27. The _____ function is used to convert string data as integer data explicitly.
a) print( ) b) input( ) c) print d) int( )

28. In Python, comments begin with hash symbol _____.
a) @ b) $ c) # d) &

29. Python breaks each logical line into a sequence of elementary lexical components known as _____.
a) Tokens b) Identifiers c) Keywords d) Delimiters

30. Tokens are classified into _____ categories
a) 3 b) 4 c) 5 d) 6

31. A _____ is a name used to identify a variable, function, class, module or object.
a) Tokens b) Identifiers c) Keywords d) Delimiters

32. _____ are special words used by Python interpreter to recognize the structure of program.
a) Tokens b) Identifiers c) Keywords d) Delimiters

33. _____ are special symbols which represent computations, conditional matching etc.
a) Operators b) Operands c) Association d) Literal

34. The value of an operator used is called _____.
a) Operators b) Operands c) Association d) Literal

35. A _____ operator is also called as Comparative operator
a) Arithmetic b) Relational c) Logical d) Conditional

36. A _____ operator checks the relationship between two operands.
a) Arithmetic b) Relational c) Logical d) Conditional

37. In python, _____ operators are used to perform logical operations on the given relational expressions.
a) Arithmetic b) Relational c) Logical d) Conditional

38. There are _____ logical operators
a) 3 b) 4 c) 5 d) 6

39. In Python, _____ is a simple assignment operator to assign values to variable.
a) & b) * c) = d) %

40. Ternary operator is also known as _____ operator
a) Arithmetic b) Relational c) Logical d) Conditional

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41. _____ operator that evaluates something based on a condition being true or false.
    a) Arithmetic b) Relational c) Logical d) Conditional
42. Python uses the symbols and symbol combinations as _____
    a) Tokens b) Identifiers c) Keywords d) Delimiters
43. _____ is a raw data given in a variable or constant.
    a) Operators b) Operands c) Association d) Literal
44. _____ consists of digits and are immutable (unchangeable).
    a) Character Literal b) String Literal c) Boolean Literal d) Numeric Literals
45. Numeric literals can belong to _____ different numerical types
    a) 3 b) 4 c) 5 d) 6
46. In Python a _____ is a sequence of characters surrounded by quotes.
    a) Character Literal b) String Literal c) Boolean Literal d) Numeric Literals
47. A _____ is a single character surrounded by single or double quotes.
    a) Character Literal b) String Literal c) Boolean Literal d) Numeric Literals
48. The value with _____ is used to give multi-line string literal.
    a) Single Quotes b) Double Quotes c) Triple Quotes d) None of these
49. A _____ can have any of the two values
    a) Character Literal b) String Literal c) Boolean Literal d) Escape Sequence
50. In Python strings, the backslash "\" is a special character, also called the _____.
    a) Character Literal b) String Literal c) Boolean Literal d) Escape Sequence
51. _____ Escape Sequence is used to create a new line
    a) \n b) \r c) \t d) \v
52. _____ Escape Sequence is used to create a tab
    a) \n b) \r c) \t d) \v
53. _____ Escape Sequence is used to create a carriage return
    a) \n b) \r c) \t d) \v
54. A _____ data is represented by a sequence of decimal digits that includes a decimal point.
    a) Floating Point b) Decimal c) Complex Number d) Numeric
55. _____ is made up of two floating point values
    a) Floating Point b) Decimal c) Complex Number d) Numeric