

*Write the following programs*

- 1. Find the odd and even numbers in the array*
- 2. Find the vowels and consonants in a word/sentence*
- 3. Reverse a string without using built in methods*
- 4. Split the words in sentence*
- 5. Find the prime numbers in an array*
- 6. Find the highest number in an array*
- 7. Find the 3rd lowest number in an array*
- 8. Generate Fibonacci series*
- 9. Find the odd and even numbers in the array*
- 10. Find the missing numbers in series*
- 11. Find the factorial of a number using recursion*
- 12. Find if the word is a palindrome*
- 13. Write a program to compare two strings*
- 14. Sort the numbers/words in ascending/descending order*
- 15. Understand and implement all the Searching (Binary, Linear, Jump), Sorting (Quick, Bubble, Merge, Insertion, Selection, heap) algorithms*
- 16. Understand and implement Arrays, data types, and linked-lists*
- 17. Implement as many programs as possible in the areas Fibonacci series, Factorial of a number using Recursion*
- 18. Palindrome, Matrix manipulations, Prime numbers*
- 19. OOPS concepts (Abstraction, Encapsulation, Inheritance, Polymorphism) with examples*
- 20. DB concepts: Schema design, Inner, Outer joins, Complex SQLs, Migrations, problems with migration*
  - 1. <https://www.programiz.com/sql/online-compiler/>*
  - 2. Create a table with (ID, Phy, Chem, Maths) with ID as primary key.*
  - 3. Add another column Biology*
  - 4. Create 4 records*
- 21. Change data for a record or two*
  - 1. Find the ID with the highest Phy score*
  - 2. Find the ID with highest total score*
  - 3. Ascending order based on total score*
  - 4. Descending order based on total score*
  - 5. 2nd highest Maths scorer*
- 22. Build REST APIs*
  - 1. Create users*
  - 2. Read user data*
  - 3. Update user data*
  - 4. Delete a few attributes of user data and*
  - 5. Delete user records completely*
- 23. Implement the following*
  - 1. User Signup*
  - 2. User Login*
  - 3. Forgot password*
  - 4. API Authentication & Authorization*
  - 5. RBAC*

24. Core Java interview questions Collections classes, Static, Volatile, Synchronize, Serialize, Inner classes
25. Find first non repeated character in a string.
26. Given int a=2 another number given int b=3, int[]x={1,6,8,9,5} you have to add one number from the given array with a so that it will become equal to b and return the index of the array for which it matches.
27. Check whether a given string is palindrome or not using Time Complexity / HashMap
28. Find the highest frequent character in a string
29. Write a program to get values of union-intersection of two arrays (get uncommon values) A=[1,2,3,4,5] B = [5,6,7]
30. Program for nth fibonacci.
31. Write a program to find the element from an array which has the most frequency?
32. Find maximum element in a given list of integers - using function calling, for loop, in built functions, no values in array,  
negative value array, null value / null check scenario, without builtin.  
Find the 1st non repeated element - [1,2,1,3,3,5,4,4]