DSA Lec Questions

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≔ Tags	

1. WAP to calculate the circumference of a circle.

2. WAP to reverse three digit number.

3. WAP to convert centigrade temperature and convert it into fahrenheit temperature.

4. Swapping of two numbers using third variable

Linear Search

1. Mylist = [4,7,5,2,8,1,9]

   target value = 2

2. **Check if the username already exists using linear search. Add to the list if it does not exist.**

   username = ['ashish123', '123ashish', 'pritam@321', 'sonu#123', 'amit']

   password = []

3. **Check if the book exists or not using linear search algorithm.**

   Book = ['Data Science', 'AGI', 'Data Analytics', 'Modern AI']

Binary Search

1. **WAP to search a lesson from Book by page number using binary search.**

Merge-Sort Algorithm

1. **Apply merge sort on the following.**

   Input Array : [12, 11, 13, 5, 6, 7]

Insertion Sort

1. **Apply Insertion Sort on the following:**

   array = [5, 3, 8, 6, 2]

Bubble Sort

1. **Apply bubble sort on the following:**

   data = [64, 34, 25, 12, 22, 11, 90]

2. **Sort the following in descending order using bubble sort.**

   data = [64, 34, 25, 12, 22, 11, 90]

   agar normal sort karke usko reverse kiya toh bohot maarunga

Stack

1. **Apply stack implementation without size limit**

2. **Apply stack implementation with size limit.**

3. **WAP to reverse the string using stack.**

Queue

1. **Apply queue implementation without size limit.**

2. **Apply queue implementation with size limit.**

Linked List

1. **Implement Singly Linked List**

   a. Add node in the beginning

   b. Add node in between

   c. Add node in the end

   d. Delete any node

   e. Delete first node

   f. Delete last node