DSF Advance Learner Task

Sr. No	Studen Name	Task-1
1	HINDUJA BHUSHAN BISHAM	1) Given a linked list and a value x, partition it such that all nodes less than x come before nodes greater than or equal to x. 2) How to convert a sorted list to a binary search tree? 3) How do you find the third node from the end in a singly linked list?
2	MANDKE CHINMAY MUKUND	
3	MISHRA AKASH NANDKUMAR	
4	VAIDYA RAJAS ABHIJEET	
5	TAMHANE VIREN MANOJ	
6	JAGADALE JAYDEEP	
7	DIXIT RUSHIKESH H	1)How would you remove all elements from a linked list of integers which matches with given value? 2) Write a CPP to find node at which the intersection of two singly linked lists begins. 3) How do you find the second node from the end in a singly linked list?
8	GANDHI DIGZA PRAVEEN	
9	LASUNKUTE AKSHAY BALASAHEB	
10	MALUSARE DISHA SATYAWAN	
11	DEOTARE SANDHYA VIVEK	
12	AGATE ATHARVA RATNESH	
13	DARWESH MRINALI JITENDRA	
14	MORE AMOL	

Task-2	Task-3
1. Suppose you have a task list as- A) Slow/Advance learner task ,B)Defaulter,C) Home Assignment and D)Pratical Writeups. Thease task has dependencies as- A->B, C. B->C,D and D-> C For given task list, return the valid ordering of task .Hint: Graph Traversal. (Example:Input: [A, B, C, D] A <- B, C B <- C, D D <- C Return: [C, D, B, A] Explain Logic/solution in detail.	1) How would you use Hasing to find a duplicate element in a limited range array 2) Miss. Riya is at Deccan Stop in Pune and wants to to reach at Modern college to attend the Workshop. As she is new in city help her to find route which cost minimum, write a code to traverse from deccan to Modern college considering each stop in path and guide her to reach at destination.
1. In a bank, Lockers are structred like binary tree,where each locker is node and the value of node is the cash present in locker. By this arrangmment, thief can rob lockers in alternate levels only. If thief decides to rob locker at level 0 then he can rob lockers in levels 2,4,6... or he can rob lockers in levels 1,3,5,7...Find out the maximum possible amount thief can rob. Explain Solution in detail.	1) How would you use Hasing to find a duplicate element in a limited range array 2) Miss. Riya is at Deccan Stop in Pune and wants to to reach at Modern college to attend the Workshop. As she is new in city help her to find route which cost minimum, write a code to traverse from deccan to Modern college considering each stop in path and guide her to reach at destination.

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1	BODHE SHASHANK SANJAY	1) How do you find the middle element of a singly linked list in one pass? 2) How are duplicate nodes removed in an unsorted linked list? 3)How do you find the sum of two linked lists using Stack? 4)Differentiate NULL and VOID
2	DIWATE SHUBHAM TUKARAM	
3	CHAVAN RAHUL SIDDHARTH	
4	DHUMAWAT LOVKESH GAUTAM	
5	KADAM KANCHAN LAHU	
6	SHELKE PRAJAKYTA	1)What is the difference between array and linked list? 2) How To Check Whether A Linked List Is Circular ? Explain in detail. 3)Differentiate NULL and VOID 4) Mr X is packing his suitcase bag for Europe Travel and placing item directly on top of each other. Help Mr. X to arrange the items in suitcase as pertheir weight. Item with high weight should be at bottom.
7	PAWAR SHUBHAM DHANLAL	
8	SANE YADUNATH JAYANT	
9	SHINDE RUTUJA SANDIP	
10	JOSHI SARTHAK SANJAY	
11	JADHAV ANIKET RAJESH	
12	KHANDADE SAMEER RAJARAM	
13	RASAL ADITYA KIRAN	

ow Learner Task

Task-2	Task-3
1) If sorted skewed binary tree is given, how can you create a binary search tree of minimum height from it? 2) What are the advantages of binary search over a linear search? 3)What Is The Idea Behind Splaying?Define Splay Tree? 4)How does the Kruskal's Algorithm work?	1) What are the advantages and disadvantage of hashtable vs binary trees. When would you use it? 2)How is heap different from a BST?When should I use heap and when should I use BST? What are hash tables? What is collision ? 3) Write Program: a. To Create File b. To Open File c. Writing to File d. Reading From File e. Closing File
1) If sorted skewed binary tree is given, how can you create a binary search tree of minimum height from it?2)What are the advantages of binary search over a linear search?3)What Do You Mean By Balance Factor Of A Node In Avl Tree? What Are The Categories Of Avl Rotations? 4) How does the Prims Algorithm work?	1)Define HAsing.Write The Importance Of Hashing?What Do You Mean By Collision In Hashing?What Do You Mean By Hash Function?What Do You Mean By Hash Table? 2)What are the advantages of the heap over a stack? 3) Write Program: a. To Create File b. To Open File c. Writing to File d. Reading From File e.Closing File