Page:
Date: 8/9 /20 Assignment Test -1 Hosh Mahajar Roll No - OH SEIT-B Subject - DSA 1. What is a stack ? Encheain various operations performed on a stack using array with suitable diagram and functions. 2. 2 What is a linked list? Draw singly ainted list and explain its operations. obey's the principle of last in first out (Life) which means that the element which is entered at the end will come out first. Sof Here Hwill be the first end 20 on . Then 2 Stack

	Done :
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1	DEAL AND SEAL AND SEA
	There are thru major operation that can be performed on a stack
	can be herborned on a stack
	1.55.55
	1) Push operation:-
6	In push operation on element is inserted at the topmost position of the stack
	the topmost position of the clack
	angularing place masanh. oblating mine
	If top = mult then the stack is full
	If top = man the stack is full it means overflow.
9	2f toh = -1, then it means the stack
	to emply to it means underflow.
	dean'thm:
	Algorithm:
	Oth 1 - 91 toh - Man-1
	write overflow. end if. Step 2 go to stop 4.
	and if the manner of doctor
	Step 2 go to dep .4.
	step 2: - Set top = top+1
	Itah 3: - Det ctack [top] = vol
	oth 34: end
	Coult E not thought the 3 the o
-	A Q A I I I I I I I I I I I I I I I I I
+	2) Poh operation:
+	It is used to remove the infrast element
	of the stack.
	and it moons underflow.
\parallel	or a from unargion.

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	Algorithm:
	2th 1: 21 toh = -1 write underslaw End is
	write underflaw
	end y
	go to olen 4. Oth 2: Det Batack Etoch 3 = temp.
	say so the say is a say i
	oth 2: Set val = Stack [toh]
-	Dieth 3: Det toh = toh -1
	Jup 4: End
	0-1
	Rep 3) Per operation:
	It is used to remove view the value
	of the tohnost element present in the
	stack.
	If toh = -1, then it means the stock
-	If toh = -1, then it means the stock is empty, it means unsleylow
	Algorithm
	Agomus -
	sth1: If top = -1
	write underflow
	Endy
	stoha: Det val = Dtack [toh]
	step 2: Det val = Dtack [top]
	Step 4: End.

Lahajan Roll Vo: 04 SEITB Date:8/9/20) S2. I linked list is a dynamic and linear data structure of linked list is a collection of node with each node pointing to the next node the next node the node of a linked list contains data elements and the position of the previous or next node. Here the start points to the position of jurist node. & linked list is initialized as. struct mode { int data; steade struct rode & rent; struct node & start = NULL; There are various operations that can be performed on a linked list, like traversing a linked list, insertion, deletion.

Lash Mahajan SEITB Bell 16-4 Date 8/9/20 5 Traversing a linked list:-In this junction we traverse the linked list = to frenche starting pointer to the last node. It is used to view to elements of a linked list, find the length of linked list etc. the main the praversing is done by a while While (Ptr != Null) por = por -> next Majorationson pola -> data; Eg printly ("/d" ptr->data); Insertion operation:-In this operation, elements are inserted in a linked list. Insertion can be done at the beginning, or end or in between. Logic for insertion at beginning. Pto Flew rode -> next = otart-> next Otart = new node. Deletion of peration:
In this elements of the linked list are
deleted. Deletion can be clone from the
leging, or end or deletion of a given node.

	Jash Mohajon SEITB Poll No-4 Date: 8/9/20
	Logic for deletional Degning
	ptr = start &;
	start = start -> next
	ptr = start &; start = start -> next gree (ptr).
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