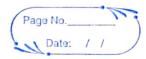


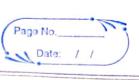
Assignment -7 Title: To write a program for implementation of symbol table and perform various operations Roblem: The symbol table is generated by compiler. It is a set of name-attribute pairs Perform the following operations on symbol table. 1) Determine if the particular name is in the table. 2) Retrieve the attribute of that name. 3) Insert new name and its attribute. 4) Delete a name and its attribute Objective: 1) To understand concept of symbol table 2) Why symbol table is needed. Outcome: 1) ** Use of symbol table. 2) Various methods of implementing Concept Related Theory: A symbol table is a data structure used by a language translator such as compiler or interpreter where each identifier in a program's source code is associated with information related to its Concept Related Theory: declaration or appearance in the source



	Date: / /
	A symbol table may only me exist during
	the translation process or it may be embedded
1	in the output of that process. Such as in
	an ABI object file for later datemore to time
	Symbol table is used to stone information
	relations to various entitres like as function
	name, variable name, object, classes etc.
	Symbol table is simply a table which can
	be either linear or hash table. It maisteins
	an entry for each name in the format
	Sumbol name topo attivity to
	< symbol name, type attribute > 1
	Symbol table
	The state of the s
	Static Simbol table to the December Control Til
	Static Symbol tablebust ab Dynamic Symbol Table
	· Unordered Array implementation. · Ordered Array implementation.
	· Unordered Array implementation
	· Ordered Array undernotatation
	· Unordered to or boordered list
	· BST Hat haloson
	· Balanced BST
	· Mashing.
1	west stub a is ability bollow A
5	Algorithms:
	ales within the milestration on interestration
+	Linear probing without replacement with
	chaining make make the
	1) Start and make all the chain-1.
	2) Find the respective bucket for the given key
	2.1) If the brucket is empty, then insert
	1 (1) (2)



	the key-value pair at that location.
	the key-volude poir at
	VOCALIBRA AND AND AND AND THE
	value of chain of previous breation
	with same been equal to the how location
3)	Fill all the succession the same manner
	value of chain of previous location with same key equal to the new location Fill all the buckets was in the same manner and make sure the chain gives the location.
	of the next relies with any live
(۸)	find [Time 1 to a]
	of the next value with same key. find [Time complexity = O(1)].
N N	Linear Probing with replacement with chaining Start
1)	Start
کی	Make all the chains of the buckets equal to
II.	~\
3)	tand the bucket for the given key.
	8.1) If the bucket is empty, then inserted
	the key-value pair at that location
· CLAI	Find the bucket for the given key. 8.1) If the bucket is empty, then inserted the key-value pair at that location 3.2) Esse replace the element stone is that
6	
	3-2.1) If the element has different key. 3.2-2) If the element has same key then store the new by key value pair at nent
	3.2-2) If the element has same key then
	store the new by key value pair at next
	vacant location.
y	The chain of the bricket will give you the
	of nent value with same key.
5	End (Time complexity = O(1))
	cide company octor
	La
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	Test Cases:
	- 12 A MAN AND THE PARTY OF THE
24	Description Expected Actual Result
	Land of the second of the seco
	Insert -
VILLE IN	25, 35, 36, 55, 57 0-78-(-1) Same as Pars. 78, 99, 89, 74 1-99-(2) expected
	78, 99, 89, 74 1 - 99 - (2) expected 2 - 89 - (-1)
`	1.3- mar 1.3-
(9)	4-74-(-1)
principle	1 the 1 Insmoody of 5+ 25 - (6) : 1-59 west
L	6 - 35 - (8)
d lu	00 student to 7-36-(-1)11 11 11 11 11
	8-55-(-1)
	med arip out 9-57-(-1)/ 11 bit
boty	in want physica is testined and there in
2)	Insert - wit 10 0-55 year Same is
test	25,35,36,55,57,1/1-35(0) as (c) Pars
	78, 99, 74 2 - 89 Expected
47	transfit and trusted to the trusted -
t	to use and on 57-25 (1)
Allar	6-35
arti I	1 - S7 1
	8 - 78
	9-99(2)
	Conducion: We were able to implement
	Conducion: We were and to implement the symbol table, with chaining successfully.
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