

* Assignment No.7*.

database of a client. make use of a hash table implementation to quickly lookup client telephone. no.

+ Objective .:

1) Basic Concept.

2) concept of recurision of Hurcenon

+ problem statement.

make use of hash table implementation to quickly took up telephone number.

* Outcomes:

Input .:

i) Enter nume .:

2) Enter phone number

Output:

Insent element int teuble search element om key delete element of a key.

· Hardware Requirement!-

848 RAM, 500 GB and intel Processon

· software Requirement .:

gedit s/w terminal, gcc/9++ compiler.



* Theory "

Hash tuble are an efficient implemented of a key array dates structure. a struct sometime known as an associative array.

+ Hashing function!

be wired holds some number of items of given set k. Inthis context we all the element of the set k key the general key inthe array is given by function is called a hash function.

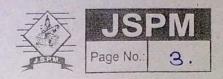
· method of hash function:

- 1) Divison method
- 2) midsquare method.
- 3) flolding method.
- 4) Digit analysis.
- 5) length dependent method,
- 6) Algebrac coding.
- 7) multicative hashing.

+ Collosion Resolotion :

Collogion resolution in the main program in hashing. If the element to be insported is mapping to the some locate when element is inserted. Then we have a collosion is it must be resolved. There are served statergies for collwin resolution. The most commonly used are

collousion resolution statusgies.



D	sepere	te channing
2)	open	addressing
		Linear problem
		Quadredic populine

c) double hashing.

oconsider on Example.

Sr. No.	Name 1	nobileno.
.	5h mey of	7298/82696.
2.	Deepika Nimball	-12/3/12/2
3.	Hurshali kale	9928242612
M .	Neha Landge	9712118018.
5.	Teju balunkke	7421349868
6.	breha kale	984442816.

In above table it is a telephone breaks list.

of peoples. How by Using linear probing we can create

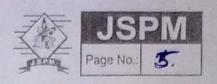
a hash tables by using abosoulue of list name letter

of name lie.

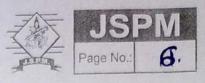
H(83).1.10=3 H(72).1.10=8 H(78).1.10=8 H(84).1.10=4 H(83).1.10=8 collogion.



	Name mod. no.			
	0			
	1 Horshali kale			
	1. Horsh.			
	3. Shoey q padue. 9928342618			
	4. Teju salunke. 72991828187			
	5. sneha kale. 8087/26421			
	6			
	7			
	8 Deepika Nimbalkar 80/8762/82			
	9 Neha landge. 97/2/18018			
	Basic Operation:			
	following are the primary operation of a hash			
	table.			
49.4	1) search: search on element in a bash table.			
	2) Firsent an element in a hash twole.			
	3) delete an element from a hash tuble.			
	o search Operation			
	Inthenever an element is to the compare the			
	hash tunie code of the key passed, and locate			
	the element using hash table tode is index in the			
	a may use it. the element is not found at the			
	computed hash code			
	Example:			
	brouet node			
	e			
	intdate;			
	int key;			
	3;			



Street node * Search (intloog) int hashindex = hash lode (key). while I hash Array (hasn Index) ! = xey) if I hash / mey Chash Index) + key = = key) return trash Array Chash Index); hash index: hashindex 1. = size; return NULLS 174. · Insent operation i Whenever an element isto he insent compute the hash tube code of key passed lode as an index in the array. Use linear probing for empty location. If an element is found at the computed hash code. Ex. Void insent (intkey intdate) Street node + item (Street node k) mallor (Size of (Streetnooe)); item - deuta = douters item - loey = key; int hash Index , hash code (icey); hash Amay [hash Index] + key [=-1); ++hash Index; hosh Indepol = Size; 4



hash Amay [hash Amay]=item;		
3.		
o Delete Operation.		
THE RESIDENCE OF THE PARTY OF T		
Whenever an element is to be deleted		
compute the hash code of the key deleted compute the hash code and locate using that		
compute the hash code and locate using that		
Use linear probing toget the element has if an		
element is not found at the comparted I tem		
there tokeep performace of the hash teather		
o Condusion.		
Hence, we have studied and implementants		
the telephone book distorry using hashing.		