

Hashing Practice

Monday, April 5, 2021 12:36 PM

3. Hash function: KILL = (11+9+12+12) % 11 = 0. Use the Value box to find the values of each character.

$$h(kk) = (11+11)\%11 = 0$$

$$h(ehl) = (5+8+12)\%11 = 25\%11 = 3$$

$$h(zia) = (26+9+1)\%11 = 3$$

$$h(az) = (1+26)\%11 = 5$$

$$h(kvk) = (11+22+11)\%11 = 0$$

Value:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

Hash Table:

0	1	2	3	4	5	6	7	8	9	10
KILL	KK		ZIA		AZ					

Operations Table:

SL NO	Operations	Collision =Yes/No	Hash Function Value	<u>Actual index</u> of the array where the operation is done Or <u>false</u> if invalid/not found	No. of boxes traversed
1	<u>insert</u> (KILL)	No	0	0	1
2	insert(KK)	Yes	0	1	2
3	<u>search</u> (EHL)	No	3	False (not found)	1
4	insert(ZIA)	No	3	3	1
5	insert(AZ)	No	5	5	1
6	<u>delete</u> (KVK)	Yes	0	False	3
7	insert(KZK)				
8	insert(AB)				
9	insert(EXAM)				
10	delete(KILL)				
11	insert(LIKE)				