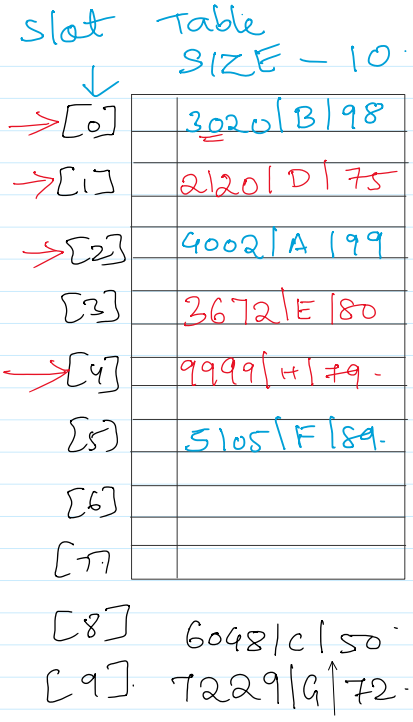
HashTables

04 July 2024 18:12



Slot Table SIZE – 10.

[0]	3020 | B | 98
[1]	2120 | D | 75
[2]	4002 | A | 99
[3]	3672 | E | 80
[4]	9999 | H | 79.
[5]	5105 | F | 89.
[6]	
[7]	
[8]	6048 | C | 50.
[9]	7229 | G | 72.

Rollno % SIZE

Key % SIZE

N = (Slot+1)%S

key.

R	4002,	3020,	6048,	2120,	3672,	5105,	7229,	9999
N	A	B	C	D	E	F	G	H
M	99	98	50	75	80	89.	72	79.

values

collision.

multiple keys trying for the same slot(index).

Hash Function must :

1) Have uniform distribution / probability
2) Be Consistent(not based on random values / current date/time)

** It is observed that multiplication with prime numbers gives more uniform index/ slots. (mathematically Proven)

Collision Handling Techniques

Open addressing

① Linear probing

② quadratic probing.

chaining.