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NeoColab_REC_CS23231_DATA STRUCTURES

REC_DS using C_Week 7_MCQ_Updated

Attempt : 1
Total Mark : 20
Marks Obtained : 3

Section 1 : MCQ

1. In the division method of hashing, the hash function is typically written as:

Answer

$$h(k) = k \% m$$

Status : Correct

Marks : 1/1

2. What is the primary disadvantage of linear probing?

Answer

Clustering

Status : Correct

Marks : 1/1

3. In division method, if key = 125 and $m = 13$, what is the hash index?

Answer

8

Status : Correct

Marks : 1/1

4. Which of these hashing methods may result in more uniform distribution with small keys?

Answer

Status : Skipped

Marks : 0/1

5. Which of the following statements is TRUE regarding the folding method?

Answer

-

Status : -

Marks : 0/1

6. Which of the following best describes linear probing in hashing?

Answer

-

Status : -

Marks : 0/1

7. In the folding method, what is the primary reason for reversing alternate parts before addition?

Answer

-

Status : -

Marks : 0/1

8. What is the worst-case time complexity for inserting an element in a hash table with linear probing?

Answer

-

Status : -

Marks : 0/1

9. In C, how do you calculate the mid-square hash index for a key k, assuming we extract two middle digits and the table size is 100?

Answer

-

Status : -

Marks : 0/1

10. Which folding method divides the key into equal parts, reverses some of them, and then adds all parts?

Answer

-

Status : -

Marks : 0/1

11. Which data structure is primarily used in linear probing?

Answer

-

Status : -

Marks : 0/1

12. What does a deleted slot in linear probing typically contain?

Answer

-

Status : -

Marks : 0/1

13. Which C statement is correct for finding the next index in linear probing?

Answer

-

Status : -

Marks : 0/1

14. In linear probing, if a collision occurs at index i , what is the next index checked?

Answer

-

Status : -

Marks : 0/1

15. What is the initial position for a key k in a linear probing hash table?

Answer

-

Status : -

Marks : 0/1

16. Which of the following values of ' m ' is recommended for the division method in hashing?

Answer

-

Status : -

Marks : 0/1

17. What is the output of the mid-square method for a key $k = 123$ if the hash table size is 10 and you extract the middle two digits of $k * k$?

Answer

-

Status : -

Marks : 0/1

18. What happens if we do not use modular arithmetic in linear probing?

Answer

-

Status : -

Marks : 0/1

19. What would be the result of folding 123456 into three parts and summing: $(12 + 34 + 56)$?

Answer

-

Status : -

Marks : 0/1

20. Which situation causes clustering in linear probing?

Answer

-

Status : -

Marks : 0/1