Rajalakshmi Engineering College

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Batch: 2028

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NeoColab_REC_CS23231_DATA STRUCTURES

REC_DS using C_Week 7_COD_Question 4

Attempt : 1 Total Mark : 10 Marks Obtained : 10

Section 1: Coding

1. Problem Statement

Develop a program using hashing to manage a fruit contest where each fruit is assigned a unique name and a corresponding score. The program should allow the organizer to input the number of fruits and their names with scores.

Then, it should enable them to check if a specific fruit, identified by its name, is part of the contest. If the fruit is registered, the program should display its score; otherwise, it should indicate that it is not included in the contest.

Input Format

The first line consists of an integer N, representing the number of fruits in the contest.

The following N lines contain a string K and an integer V, separated by a space, representing the name and score of each fruit in the contest.

The last line consists of a string T, representing the name of the fruit to search for.

Output Format

If T exists in the dictionary, print "Key "T" exists in the dictionary.".

If T does not exist in the dictionary, print "Key "T" does not exist in the dictionary.".

Refer to the sample outputs for the formatting specifications.

Sample Test Case

```
Input: 2
    banana 2
    apple 1
    Banana
   Output: Key "Banana" does not exist in the dictionary.
    Answer
    #include <iostream>
   #include <unordered_map
#include <string>
    using namespace std;
    bool keyExists(unordered_map<string, int>& dictionary, string key) {
      return dictionary.find(key) != dictionary.end();
    int main() {
      int n:
      cin >> n;
    unordered_map<string, int> dictionary;
```

```
for (int i = 0; i < n; ++i) {
    string key;
    int value;
    cin >> key >> value;
    dictionary[key] = value;
}

string key_to_search;
cin >> key_to_search;

if (keyExists(dictionary, key_to_search)) {
    cout << "Key \"" << key_to_search << "\" exists in the dictionary." << endl;
} else {
    cout << "Key \"" << key_to_search << "\" does not exist in the dictionary." << endl;
}

return 0;
}

Status: Correct

Marks: 10/10</pre>
```

Status : Correct