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<stdio.h>
   #include<string.h>
#define MAX_FRUITS 15
   #define MAX_NAME_LEN 21
   typedef struct{
     char name[MAX_NAME_LEN];
     int score;
   }Fruit;
   int main(){
     int n,i;
     char searchName[MAX_NAME_LEN];
     Fruit fruits[MAX_FRUITS];
     int found=0;
     scanf("%d",&n);
    for(i=0;i<n;i++){
       scanf("%s %d",fruits[i].name,&fruits[i].score);
```

```
scanf("%s",searchName);
for(i=0;i<n;i++){
    if(strcmp(fruits[i].name,searchName)==0){
        found=1;
        break;
    }
}
if(found){
    printf("Key \"%s\" exists in the dictionary.\n",searchName);
}else{
    printf("Key \"%s\" does not exist in the dictionary.\n",searchName);
}
return 0;
}

Status: Correct

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

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