Rajalakshmi Engineering College

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NeoColab\_REC\_CS23231\_DATA STRUCTURES

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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.

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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.

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*Input Format*

contest.

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

for.

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

*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

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Refer to the sample outputs for the formatting specifications.

dictionary.".

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*Sample Test Case*

Input: 2 banana 2

apple 1

Banana

Output: Key "Banana" does not exist in the dictionary.

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*Answer*

// You are using GCC

#include <stdio.h>

#include <string.h>

#define MAX 20 #define MAXLEN 30

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struct Fruit { char name[MAXLEN];

int score;

};

void searchFruit(struct Fruit fruits[],int n,char target[]){ int found = 0; for (int i =0; i<n;i++) {

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if (strcmp(fruits[i].name, target)== 0) { found =1;

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break;

}

}

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if (found){

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printf("Key \"%s\"exists in the dictionary.\n",target);

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}

else{

printf("Key \"%s\"does not exist in the dictionary.\n",target);

}

}

int main()

{ int N; scanf("%d",&N); struct Fruit fruits[MAX]; char target[MAXLEN];

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for (int i = 0;i <N; i++) {

scanf("%s %d", fruits[i].name,&fruits[i].score);

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}

scanf("%s",target); searchFruit(fruits, N,target); return 0; }

*Status :* Correct *Marks : 10/10*

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