**Laney College**

**Computer Information Systems (CIS) Department**

**Programming Assignment Cover Sheet**

**Class: CIS26Fall2011**

**Name: KaChiLau**

**Email:** [**Nicokorin@hotmail.com**](mailto:Nicokorin@hotmail.com)

**Lab Number: Lab7**

**Exercise Number: Ex1**

**Actual Turn-in Date: December 13, 2011**

**Date of Emailing of Last Revision: December 13, 2011**

**Code:**

/\*\*

\*Program Name: CIS26Fall2011L43671KaChiLauLab7Ex1.c

\*Discussion: Formatted Inputs

\*/

#include <stdio.h>

#include <stdlib.h>

void menuVersion2KaChiLau(void);

int extractLargestDigitOccurrenceKaChiLau(int\*);

void displayClassInfoKachil(void);

int main() {

displayClassInfoKachil();

menuVersion2KaChiLau();

return;

}

void displayClassInfoKachil() {

printf("CIS 26 - C Programming\n");

printf("L43671\n");

printf("Laney College\n");

printf("KaChiLau\n");

printf("\n");

printf("Assignment Information --\n");

printf(" Assignment Number: Lab 07,\n");

printf(" Coding Assignment -- Exercise #1\n");

printf(" Written by: KaChiLau\n");

printf(" Submitted Date: December 13, 2011\n\n");

return;

}

void menuVersion2KaChiLau() {

int\* klptr;

int kloption;

klptr = (int\*) malloc ( 10 \* sizeof(int));

do {

printf("\n \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

printf("\n \* MENU \*");

printf("\n \* 1) extractLargestDigitOccurrenceKaChiLau() \*");

printf("\n \* 2) Quit \*");

printf("\n \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

printf("\n Enter the option (1 or 2): ");

scanf("%d", &kloption);

switch(kloption) {

case 1:

printf("\n extractLargestDigitOccurrenceKaChiLau() --\n");

extractLargestDigitOccurrenceKaChiLau(klptr);

break;

case 2:

printf("\n Have fun ...\n\n");

break;

default:

printf("\n\tWRONG OPTION!\n\n");

}

} while (kloption != 2);

return;

}

int extractLargestDigitOccurrenceKaChiLau(int\* klptr) {

int kla;

int klb;

int i;

int klmax = 0;

int klcount;

int ary[100] = {0};

printf("How many integers (must be greater than 1) ? ");

scanf("%d", &kla);

for(i = 1; i <= kla; i++) {

printf("\tEnter integer #%d: ", i);

scanf("%d", &\*(klptr + i));

if (\*(klptr + i) < 0) {

\*(klptr + i) = -\*(klptr + i);

}

klcount = 0;

while(\*(klptr + i) != 0) {

klb = \*(klptr + i) % 10;

if(klb > klmax) { //find the max;

klmax = klb;

}

if(klb == klmax) { //find the occrrence

klcount += 1;

ary[i] = klcount;

}

\*(klptr + i) = \*(klptr + i) / 10;

}

}

printf("\tThe Largest Digi: %d\n",klmax);

for(i = 1; i <= kla; i++) {

printf("\tFor integer #%d: \n", i);

printf("\t\tThere is %d occurrence of digit %d .\n", ary[i], klmax);

}

return 0;

}

**Output:**

CIS 26 - C Programming

L43671

Laney College

KaChiLau

Assignment Information --

Assignment Number: Lab 06,

Coding Assignment -- Exercise #1

Written by: KaChiLau

Submitted Date: November 29, 2011

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\* MENU \*

\* 1) Calling extractLargestDigitKaChiLau() \*

\* 2) Calling displayDigitOccurrenceKaChiLau() \*

\* 3) Quit \*

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Enter the option (1, 2, or 3): 4

WRONG OPTION!

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\* MENU \*

\* 1) Calling extractLargestDigitKaChiLau() \*

\* 2) Calling displayDigitOccurrenceKaChiLau() \*

\* 3) Quit \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Enter the option (1, 2, or 3): 1

Calling extractLargestDigitKaChiLau() -

Enter a integer: 3287401

The largest digit : 8

Its position : 5

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\* MENU \*

\* 1) Calling extractLargestDigitKaChiLau() \*

\* 2) Calling displayDigitOccurrenceKaChiLau() \*

\* 3) Quit \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Enter the option (1, 2, or 3): -1

WRONG OPTION!

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\* MENU \*

\* 1) Calling extractLargestDigitKaChiLau() \*

\* 2) Calling displayDigitOccurrenceKaChiLau() \*

\* 3) Quit \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Enter the option (1, 2, or 3): 2

Calling displayDigitOccurrenceKaChiLau() --

Enter 2 integer --

First integer : 3287401

Second integer : 15289

Occurrence of digits --

Digit 0 : 1

Digit 1 : 2

Digit 2 : 2

Digit 3 : 1

Digit 4 : 1

Digit 5 : 1

Digit 6 : 0

Digit 7 : 1

Digit 8 : 2

Digit 9 : 1

Total number of occurrence(s) for all digit(s) : 12

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\* MENU \*

\* 1) Calling extractLargestDigitKaChiLau() \*

\* 2) Calling displayDigitOccurrenceKaChiLau() \*

\* 3) Quit \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Enter the option (1, 2, or 3): 3

Have fun ...

**Comment:**

I only got the largest number; I don’t have any idea for the occurrence,

I tried using array and an other malloc to stole and retrieve the digit, but after the first while, it would become 0, and can’t run for the next while**.**