**CSC3320 System Level Programming**

**Lab Assignment 7 - Post-Lab**

Due at 11:59 pm on Friday, March 5, 2021

Purpose: Learn how to get input and print out formatted results using *scanf* and *printf* separately in C.

**Part 1:**

1) Write a C program named as ***getPhoneNumber.c*** that prompts the user to enter a telephone number in the form (999)999-9999 and then displays the number in the form 999-999-999:

Enter phone number [(999)999-9999]: (404)123-4567 You entered 404-123-4567

Question: Execute your **getPhoneNumber.c** and attach a screenshot of the output. Then write the source code of **getPhoneNumber*.c*** in your answer sheet and upload your file **getPhoneNumber***.****c*** to googleClassroom.



#include <stdio.h>

int main (void)

{

int i, k;

char input[15], output[15];

printf("Enter phone number in the format \"(999)999-9999\" : ");

scanf ("%s", input);

k=0;

for (i=0; i<15; i++)

{

if (input[i] != '(' && input[i] != ')')

{

output[k]=input[i];

k++;

}

else if (input[i] == ')')

{

output[k] = '-';

k++;

}

}

printf ("You entered this phone number: %s\n", output);

return 0;

}

2) Write a program named as ***calcPrice.***c that formats product information entered by the user and calculate the total amount of purchase.

Enter item number:583

Enter unit price:13.5

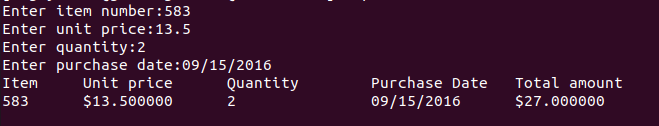
Enter quantity:2

Enter purchase date (mm/dd/yyyy):09/15/2016

Item Unit Price QTY Purchase Date Total Amount 583 $ 13.50 2 9/15/2016 $ 27.00

The item number, quantity and date should be left justified; the unit price and total amount should be right justified. Hint: Use tabs to line up the columns. Question: Execute your **calcPrice.c** and attach a screenshot of the output. Then write the

source code of **calcPrice.c** in your answer sheet and upload your file **calcPrice.c** to classroom.



#include <stdio.h>

int main(){

int item\_number;

double item\_price;

int quantity;

char date[20];

printf("Enter item number:");

scanf("%d",&item\_number);

printf("Enter unit price:");

scanf("%lf",&item\_price);

printf("Enter quantity:");

scanf("%d",&quantity);

printf("Enter purchase date:");

scanf("%s", &date);

printf("Item \t Unit price \t Quantity \t Purchase Date \t Total amount \n");

printf("%d \t $%lf \t %d \t \t %s \t $%lf \n \n", item\_number, item\_price, quantity, date, item\_price \* quantity);

return 0;

}

**Part 2: (Optional)**

Note : This part is not for grading. But you will get some feedback. Can you write a shell script to finish the same task as in question 1) of Part 1?

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***Submssion***:

• Please follow the instructions below step by step, and then write a report by answering the questions and upload the report (named as

Lab7\_FirstNameLastName.pdf or Lab7\_FirstNameLastName.doc) to Google Classroom, under the rubric Lab 7 Out-of-lab Assignment. • Upload files **getPhoneNumber.c** and **calcPrice.c** to the rubric named “Lab7” of the classroom. **Note: if you do not upload the C files you would get zero for this assignment**.

• Please add the lab assignment NUMBER and your NAME at the top of your file sheet.

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