

## **CSE 115: Programming Language I Lab**

### **MID TERM EXAM**

**Due: 24-12-2020(11:59 PM)**

**Marks: 50**

#### **Instructions:**

- i. Submit five .C file( without zip/rar)**
- ii. Submit Screenshot of output.**
- iii. Write your name, id, serial using comments in each C file.**
- iv. Write reference links using comments if you take anything from the internet.**

**1. Write a program to take your full name, id, HomeTown, All Courses names and course codes of fall20, All faculties names of fall20, All sections of fall 20, All credits of fall20 courses from **user input**. Then Print all information. (10)**

#### **Note:**

- i) Must Follow sample output format**
- ii) Use your real info**

#### **Sample Output:**

Name: Nur Hossain      Id: 1530254      Homwtown: Feni

Fall'20 Courses:

Code	Name	Credit	Section	Faculty
CSE115	Programming Language I	3	11	TNS1
CSE215	Programming Language II	3	12	SAK1
CSE173	Discrete Mathematics	3	13	MSK1

2. Given Data:

<b>Name.</b>	<b>TotalStudent</b>	<b>PassRate</b>
NSU	4000	90%
IUB	3000	80%
AIUB	2000	70%
BRAC	1000	60%
UIU	500	50%

i) Write a **user-defined function** to find the **average pass rate and average Total Students of three universities (Nsu, Brac, UIU)** (5)

ii) Write another **user-defined function** to find the **Total students and Average pass rate of five universities.** (5)

**Note:**

i) Use one. C file for both problem

3. Take 10 employees' salary from user input in the **main function.** (10)

Now Write a **user-defined function** to find **1st, 2nd, and 3rd lowest salaries.** Then **print the results from the main function.**

**Note:**

i) You can't return any variable from a user-defined function.

ii) You can't declare any variable except counter variables in the user-defined function

iii) You can declare parameters in the user-defined function.

iv) you can't print anything in the user-defined function.

4. Write a user-defined function **inputData** to take 15 students' names and total marks **from user input**. Print students **names here** and **pass total marks to OddCal and evenCal functions**

Write a function **oddCal** to calculate odd numbers and store them in an array. Return the result to the main function

Write another function **evenCal** to calculate even Numbers and store them in an array. Return the result to the main function.

**Finally, print the odd and even from the main function.** (10)

5. Given marks of five students, (10)

	CSE115	CSE215	Cse173
Sakib.	14	54	36
Mushfiq	58	58	55
Mustafiz	74	77	52
Tamim	44	77	55
Mashrafee	52	45	88

Declare a 2D array using Students marks and Another string array using names. Then find the Total marks of each students using that 2D array. Print total marks with their names.

**Sample Output:**

<b>Name</b>	<b>Total marks</b>
<b>Sakib</b>	<b>104</b>
<b>Mushfiq</b>	<b>171</b>
<b>Mustafiz</b>	<b>203</b>
<b>Tamim</b>	<b>176</b>
<b>Mashrafee</b>	<b>185</b>