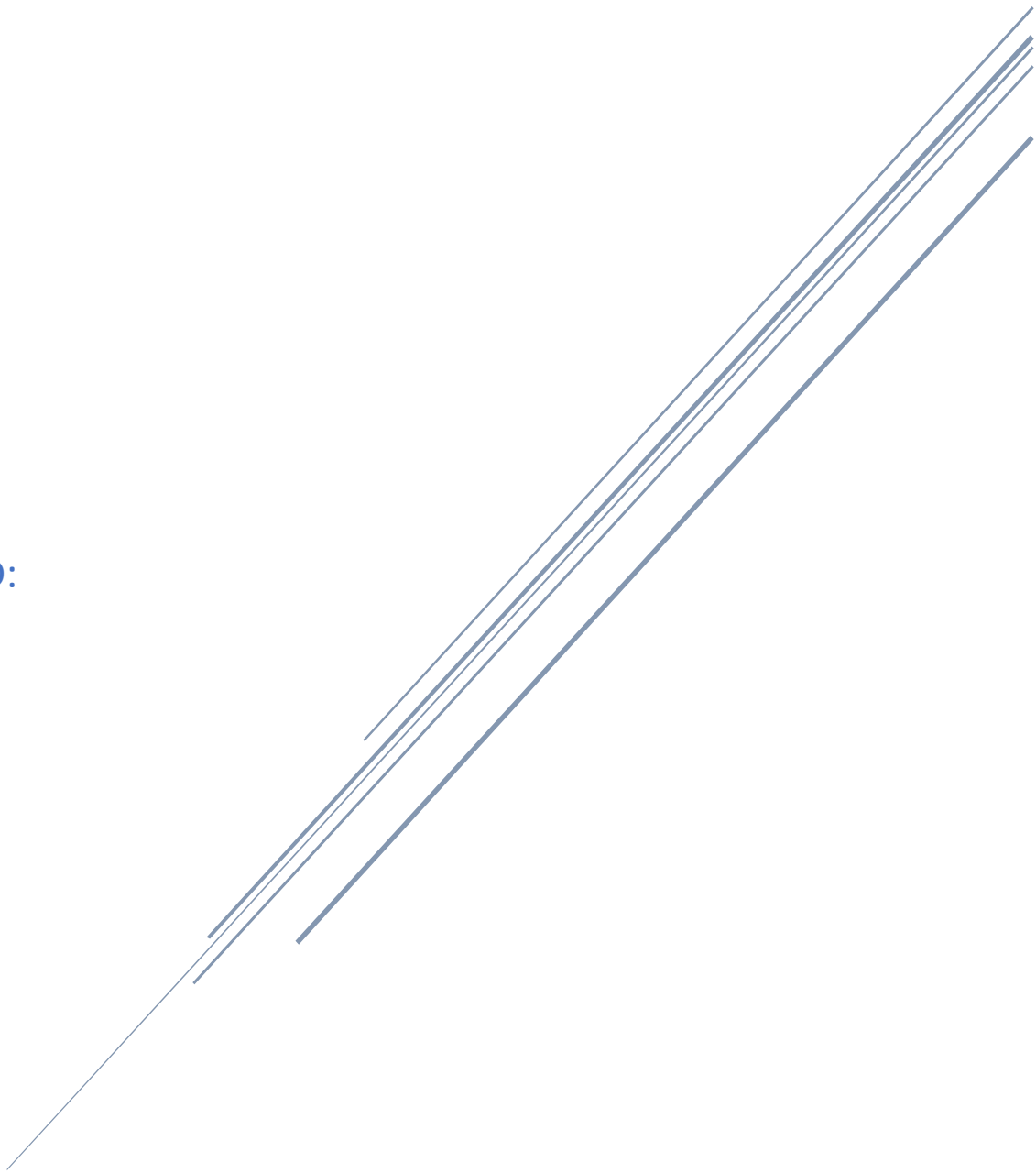
COMPUTER PROGRAMMING I
GROUP ( ) LAB (6)



BY

NAME:

Student ID:

DATE:

LAB INSTRUCTION

- LAB Mode: **INDIVIDUAL**.
- Submition:-
  - Hard copy.
  - Softcopyas PDF format to Google Classroom.
  - ProgramingCode.
- The font must be **ARIAL**andthe size must be **12. JUSTIFY. SPACING 1.5**.
- Use**YOUR NAME, SURNAME**, and**DATE**as a variable in youranswer.
- Complete thecoversheetandattach it toyourlab as (firstpage).
- Answerlabwithownwork (***NO PLAGIARISM***).
- Yourmarkswill be deducted in thecase of:
  - Latesubmission.
  - Plagiarism.

LAB QUESTIONS

1. **Show two different ways to initialize character array vowel with the string of vowels "AEIOU".**

2. **Write a program that inputs a line of text into char array s[100]. Output the line in alternate uppercaseletters and lowercase letters.**

3. **Write a program that inputs six strings that represent integers, converts the strings to integers, and calculates the sum and average of the six values.**

4. **Write a program that uses function strcat to concatenate two strings provided by the user. The program should print the strings before and after concatenating as well as the length of the concatenated string.**

5. **Find the error in each of the following and explain how it can be corrected.**

   a) The following statement should print the character 'c'.

   ```
   printf("%s\n", 'c');
   ```

   b) The following statement should print 9.375%.

   ```
   printf("%.3f%", 9.375);
   ```

   c) The following statement should print the first character of the string "Monday".

   ```
   printf("%c\n", "Monday");
   ```

   d) puts(""A string in quotes"");

   e) printf(%d%d, 12, 20);

   f) printf("%c", "x");

g) printf("%s\n", 'Richard');

6. Write a statement for each of the following:

a) Print 1234 right justified in a 10-digit field.

b) Print 123.456789 in exponential notation with a sign (+ or -) and 3 digits of precision.

c) Read a double value into variable number.

d) Print 100 in octal form preceded by 0.

e) Read a string into character array string.

f) Read characters into array n until a nondigit character is encountered.

g) Use integer variables x and y to specify the field width and precision used to display the double value 87.4573.

h) Read a value of the form 3.5%. Store the percentage in float variable percent and eliminate the % from the input stream. Do not use the assignment suppression character.

i) Print 3.333333 as a long double value with a sign (+ or -) in a field of 20 characters with a precision of 3.