The assignment will be graded out of 100 points.

Due: 11:59pm ending Wednesday, June 20, 2018.

Submission Guidelines:

Assignment will be submitted via Blackboard. If there are multiple files that you are submitting then you should zip your files into a single file and submit it. The name of this file should be in following format: lastname_firstname_UTA ID/NetID. If you are submitting a single file, make sure it is in the following format: word, txt or pdf and it should be named as mentioned above.

Make sure your name and your student ID are listed in your assignments.

Deductions for failing to follow directions:

If your assignment is not completed by the deadline, send it anyway and review it with the TA for partial credit. Do not take a zero or excessive late penalties just because it isn't working yet. We will make an effort to grade you on the work you have done.

Note:

If you are submitting more that 1 file, do not forget to zip all the files in ONE folder

Example:

Task1.c
Task2.c
.
.
.

Task14.c

After that, copy all the C files into one folder and compress(zip) the folder. Then, submit only the zip folder on Blackboard.

Assignment Specification:

For ALL the Tasks please get the values from user as input.

Task 1 (10 pts.)

In a file called task1.c, write a C program to find maximum between three numbers using if else.

Example:

Input
Input num1: 12
Input num2: 22
Input num3: 15

Output
Maximum is: 22

Task 2 (10 pts.)

In a file called task2.c, write a C program to check whether a number is even or odd using if else.

Example:

Input
Input number: 16

Output
16 is even number

Task 3 (10 pts.)

In a file called task3.c, write a C program to check whether an alphabet is vowel or consonant using if else.

Example:

Input
Input character: a

Output

'a' is vowel

Task 4 (10 pts.)

In a file called task4.c, write a C program to input sides of a triangle and check whether a triangle is equilateral, scalene or isosceles triangle using if else.

Example:

Input:
Input first side: 30
Input second side: 30
Input third side: 30

Expected output:
Triangle is equilateral triangle

Hint:

Properties of Triangles:

- A triangle is said Equilateral Triangle, if all its sides are equal. If a, b, c are three sides of triangle. Then, the triangle is equilateral only if a == b == c.
- A triangle is said Isosceles Triangle, if its two sides are equal. If a, b, c are three sides of triangle. Then, the triangle is isosceles if either a == b or a == c or b == c.
- A triangle is said Scalene Triangle, if none of its sides are equal.

Task 5 (10 pts.)

In a file called task5.c, write a C program to input character from user and check whether character is uppercase or lowercase alphabet using if else.

Example:

Input:
Input character: X

Expected output:
'X' is uppercase alphabet

Task 6 (10 pts.)

In a file called task6.c, write a C program to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer, calculate percentage and grade according to given conditions:

If percentage >= 90%: Grade A
If percentage >= 80%: Grade B
If percentage >= 70%: Grade C
If percentage >= 60%: Grade D
If percentage >= 40%: Grade E
If percentage < 40%: Grade F

Example:

Input:
Input marks of five subjects:
95
95
97
98
90

Expected output:
Percentage = 95.00
Grade A

Task 7 (5 pts.)

In a file called task7.c, write a C program to find week day name using switch case

Example:

Input:
Input day number in week (1-7): 2

Expected output:
Tuesday

Task 8 (5 pts.)

In a file called task8.c, write a C program to create calculator that performs basic arithmetic operations (add, subtract, multiply and divide) using switch case. he calculator should input two numbers and an operator from user. It should perform operation according to the operator entered and must take input in given format:

<number 1> <operator> <number 2>

Example:

Input:
5.2 - 3

Expected output:
2.2

Task 9 (5 pts.)

In a file called task9.c, write a C program to find out the ASCII code of '2', 'A' and '$'.

Task 10 (5 pts.)

In a file called task10.c, write a C program to print all the alphabets and their corresponding ASCII codes. Use loop to write the code.

Example:

A ----→ ASCII code

…

Y---→ ASCII code

Z---→ ASCII code

Task 11 (5 pts.)

In a file called task11.c, write a C program to create the following pattern using for loops:

*****

****

***

**

*

Task 12 (5 pts.)

In a file called task12.c, write a C program to create the same pattern in task 12 using While loop.

Task 13 (5 pts.)

In a file called task13.c, write a C program to print the **multiplication table** from 1 to 10.

Task 14 (5 pts.)

In a file called task14.c, write a C program to find out whether the input provided, is a prime number or not.

Assignment Guidelines:

There will be several programming assignments in this course, typically assigned on a weekly basis. All assignments will have equal weight. No assignment scores will be dropped. The following class policies regarding assignments will be followed:

- All assignments (programs) should be **tested** on Omega using gcc before submission.
- All assignments must be submitted via Blackboard.
- No deadline extensions for the entire class will be provided. (See syllabus about policy on extensions for individuals, based on emergencies documented in writing).
- No extra credit will be provided.
- If you make multiple submissions to Blackboard for the same assignment, only the latest submission will be graded.

Late submission policy:

- All assignments are graded out of 100 points. Assignments submitted late will be penalized, at a rate of 4 penalty points per hour. The submission time will be the time shown on Blackboard. Any assignment submitted more than 25 hours late will receive no credit.
- Exceptions to late submission penalties will only be made for emergencies documented in writing, in strict adherence to UTA policy. For all such exception requests, the student must demonstrate that he or she made all efforts to notify the instructor as early as possible.
- Computer crashes, network crashes, and software or hardware failure will NOT be accepted as justification for late submissions. If you want to minimize chances of a late submission, aim to submit early. You can always revise your submission till the deadline.
- Sometimes students submit the wrong files on Blackboard. Unfortunately, no credit or waiver of late penalties can be provided in such cases.
- If you find yourself in an emergency situation and cannot deliver homework on time, immediately inform the instructor and teaching assistant. Even if you have a valid reason for delivering late an assignment, you must make a convincing case that you have notified the instructor and teaching assistant as early as possible.

If you want to minimize chances of a late submission, aim to submit early. You can always revise your submission till the deadline.