

Programming Fundamentals

Lab task Week 08

Note:

- Plagiarized task will be awarded zero marks.
- There will be deduction in marks for late submission.
- Submit c files with proper file name for each task (eg: Fariba_Laiq_Task_1.c)

Task 1:

Write a program that converts Celsius to Fahrenheit through a function. Your function should accept one argument and prints the results within the function.

Formula: $F = 9/5C + 32$

Task 2:

Write a program in C that contains a function to calculate third angle of triangle.

- Declare two angles in main.
- The function should take two angles as parameters.
- The function will calculate the third angle and return it to main.
- The program should print value of third angle in main.

Task 3:

Write a program in C that contains a function to reverse a three-digit number.

- The function should take the number as parameter.
- The function should reverse the number and print the reversed no within the function

Hint: Use modulus %

E.g.: 123 is your integer. Output: 321

Task 4:

Write a program that stores the monthly costs for the following expenses generated from operating his or her automobile: loan payment, insurance, gas, oil, tires, and maintenance. The program should then display the total monthly cost of these expenses, and the total annual cost of these expenses. Your program should have two functions named `calcMonthlyExp()` and `calcYearlyExp()`.

Note: The `calcMonthlyExp()` will only calculate the monthly expenses and returns the result. The `calcYearlyExp()` will get the result from `calcMonthlyExp()` and then calculates the yearly expenses and returns the yearly expenses to main. Monthly expenses should be displayed in `calcMonthlyExp()` function and yearly expenses should be displayed in main function.

Note: Your main function should only call `calcYearlyExp()`.

Task 5:

Pizza Pi

Alan Pizza Palace needs a program to calculate the number of slices a pizza of any size can be divided into. The program should perform the following steps:

- A) Stores the diameter of the pizza in inches (in the function).
- B) Calculate the number of slices that may be taken from a pizza of that size (task should be performed using a function that does not accept any argument but returns the no of slices). Each slice should have an area of 14.125 inches
- C) Display a message telling the number of slices (in main).