



## Lab 2 : Conditioned statements

**Exercise 1:** Write a C program that checks if a number entered by the user is even or not.

**Exercise 2:** Write a C program (convert\_weight.c) that reads a real number 'p' and the unit 1 for kg or 2 for pounds. If the unit is kg, it converts the weight to pounds, otherwise, it converts it to kg.

1 Kg = 2.20462 pounds.

The program must display the message "Thanks, bye!" at the end.

**Exercise 3 :** We want to calculate the amount of taxes due for an employee. The following grid is to be used:

Salary	Taxes
salary < 15000 DA	5 %
15000 DA ≤ salary < 30000 DA	10 %
30000 DA ≤ salary < 60000 DA	20 %
60000 DA ≤ salary	25 %

Write a C program1 that reads the salary and prints out the amount of taxes to be payed.

**Exercise 4:** Write a C program to solve the equation  $ax^2 + bx + c = 0$ , considering all special cases. a, b, and c are given by the user.

**Exercise 5:** Write a C program that prompts the user to enter two real numbers A and B, then displays a menu of possible operations (1: addition, 2: subtraction, 3: multiplication, 4: division) and applies the operation chosen by the user to the two numbers A and B. The program must display an error message in the case of division if B=0.

**Exercise 6:** Write a C program that displays the day corresponding to a number between 1 and 7 entered by the user. If the number entered is not between 1 and 7, the program displays "The number entered does not correspond to any day".

Give the nested if and switch versions.