

Tutorial 3

Conditional statements (if..else, switch)

Exercise 1:

1. Write the algorithm that reads a number and displays either it is an odd or even one.
2. Write the algorithm that reads three numbers, then it displays their maximum.
3. Write an algorithm that calculates the ideal weight based on the height of the person entered in centimeters using the following formula:

Ideal Weight (IW) = (height in cm - 100) - (height cm - 150)/f,
where f = 4 for males, f = 2.5 for females.

Exercise 2:

- a. Draw the flowchart that solves the second order equation, $aX^2+bX+c = 0$; where a, b, and c are numbers given by the user.
- b. Write the algorithm that solves the second order equation, $aX^2+bX+c = 0$; where a, b, and c are numbers given by the user.
- c. Write the corresponding C program (only for practical work)

Exercise 4:

Write the C program that (use switch):

- a. Asks the user if he wants to calculate the area of a circle, a square, or a rectangle
- b. Allows the user to corresponding input data
- c. Displays the result.

