

Functions

1- Write a program that receives the values of A, B and C from a quadratic function and calculates the values of delta, x1 and x2, vx (vertex of x) and vy (vertex of y) using five functions to be printed in the main function.

2- Change the previous program to calculate the values of x1 and x2 in a single function called roots. Pass the arguments x1 and x2 by reference.

3- Write a program that includes the following operations on a matrix of real numbers: Record data, display data, calculate the sum of the data. The program should be developed using functions to create the menu, record the data and display the data.

Data: $\text{delta} = B^2 - 4AC$, $x1 = \frac{-B + \sqrt{\text{delta}}}{2A}$, $x2 = \frac{-B - \sqrt{\text{delta}}}{2A}$, $Vx = -\frac{B}{2A}$ and $Vy = -\frac{\text{delta}}{4A}$