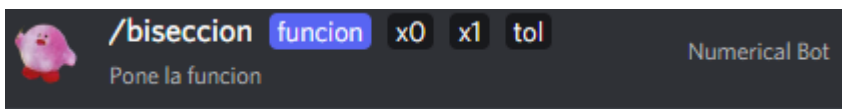


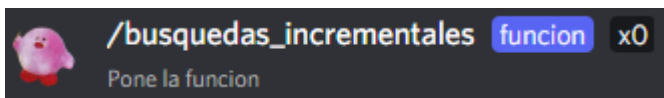
User guide

The application interface is through the discord application since from this the different commands are executed with which each of the functionalities developed in relation to the course can be executed.

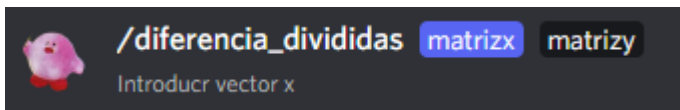
-For the bisection method, the system asks for the input of a function, an X_0 , an X_1 and a tolerance.



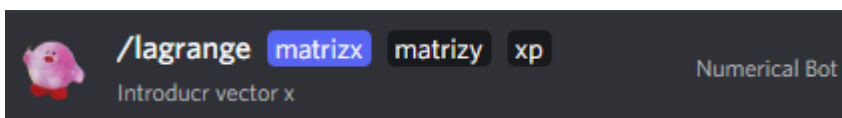
-For incremental searches the input of a function and an X_0 is required.



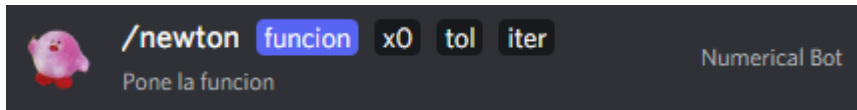
-For divided differences it is necessary to enter the income of two vectors for the solution.



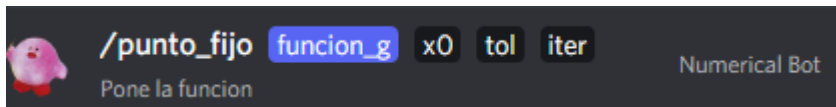
-For LaGrange it is necessary to enter the entry of two vectors for the solution and the entry of the point that is sought.



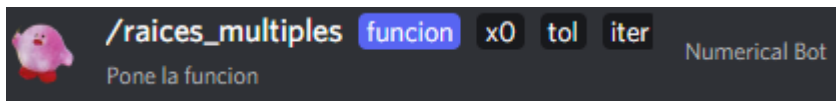
-For newton it is necessary to enter the function an initial X_0 , a tolerance and a number of iterations.



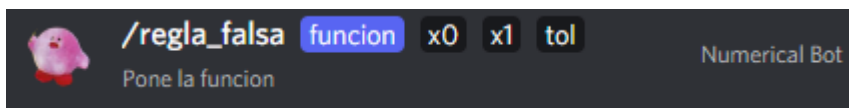
-For a fixed point it is necessary to enter the function an initial X_0 , a tolerance and a number of iterations.



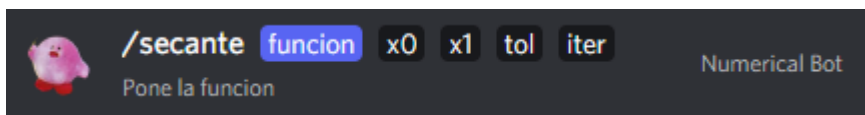
-For multiple roots it is necessary to enter the function an initial X_0 , a tolerance and a number of iterations.



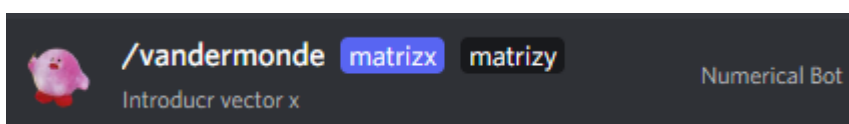
- To regulate falsi it is necessary to enter the function an initial X_0 , an initial X_1 and a tolerance.



- For secant it is necessary to enter the function an initial X_0 , an initial X_1 , a tolerance and a number of iterations.

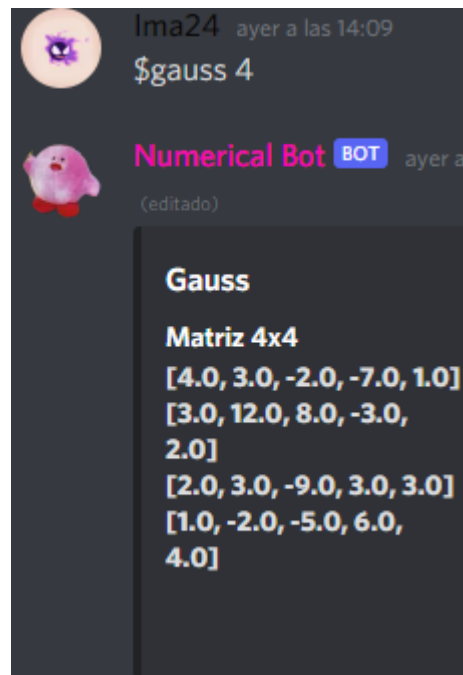


- For the vandermonde method the input of the two vectors used for the calculation is needed.

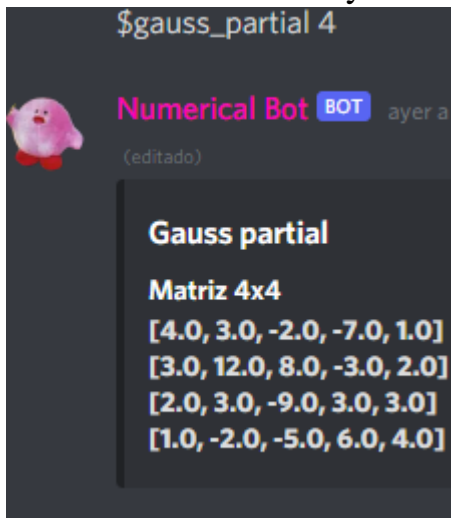


For gauss-based methods you need to use a different command which is:

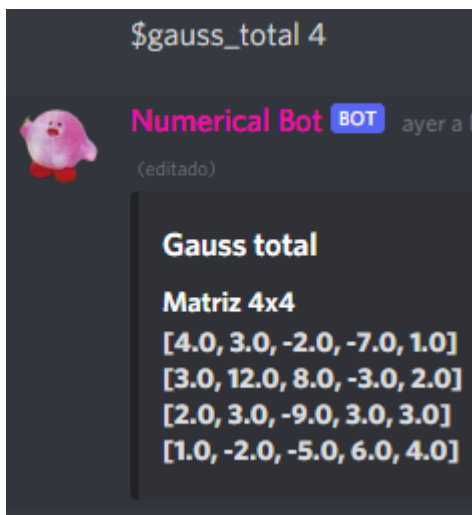
For simple gauss we must insert in a line `$ gauss n`, where `n` is the size of the matrix and then you must enter the coefficients of each row line by line.



For partial gauss we must insert in a line `$ gauss_partial n`, where n is the size of the matrix and then you must enter the coefficients of each row line by line.



For total gauss we must insert in a line `$ gauss_total n`, where n is the size of the matrix and then you must enter the coefficients of each row line by line.



For Seidel gauss we must insert in a line `$ gauss_Seidel n`, where n is the size of the matrix and then you must enter the coefficients of each row line by line.



Ima24 ayer a las 19:20

\$gauss_Seidel 4



Numerical Bot BOT ayer a las 19:20

(editado)

Gauss Seidel

Matriz 4x4

[4.0, 3.0, -2.0, -7.0, 1.0]

[3.0, 12.0, 8.0, -3.0, 2.0]

[2.0, 3.0, -9.0, 3.0, 3.0]

[1.0, -2.0, -5.0, 6.0, 4.0]