

Project Plan: CALL C function From MATLAB

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Project Purpose:

- Learn How to Call C function From MATLAB
- Compare the efficiency and necessity
- Understand why this is necessary:
 - ✧ To use pre-existing functions or libraries
 - ✧ Increase speed

Project Work:

Teammate A:

Research the detail of the interface of MATLAB to C and get similar with **data type** and **functions** defined in “mex.h” and teach other two teammates. Make some example code about How to deal with the interface to C.

Teammate B:

Select a topic to compare the efficiency using program written in matlab function with program written in c function. Both programs need follow the same algorithm and include the many **loops**. Result need be made in graph and comparison need be made.

Teammate C:

Select a topic to prove the necessity of calling C from Matlab. C program need be written using **gsl library** to solve some special scientific problem which matlab build-in function is not so good at.

Presentation

Each teammate will do 5-min presentation for one's responsible part.

Reference

- Writing C functions in Matlab(MEX-Files) Jason Laska,
<http://cnx.org/content/m12348/latest/>
- Calling C from Matlab:introduction Andreas Uhl ,
<http://www.cosy.sbg.ac.at/~uhl/C-matlab.pdf>
- More to add...