Screening Task: Control System toolbox development

- The screening task involves implementing Scilab functions for the Control System Toolbox, similar to how they are implemented in Octave under the 'control' package.
- Select any three functions from the provided list which you wish to implement in Scilab.

Link: Control System functions

Preparation:

- Ensure Octave is installed on your system, preferably the latest version (≥ 3.8).
- Install the 'control' package in Octave, a dependency for Control System operations.
- Examine the documentation of the corresponding functions in Octave to understand their structure and functionality.
- Using Scilab, reimplement these functions by creating respective .sci files with appropriate function calls.
- Create a README file for each function that includes a description of the function, the calling sequence, a detailed explanation of each parameter, and at least 4-5 test cases to verify the function's accuracy and effectiveness.
- Software Requirements for Scilab Function Development:
 - Use the Scilab software platform for writing and testing functions.
 - Familiarize yourself with Scilab's syntax and documentation for effective function creation.
 - Utilize the Scilab built-in functions and libraries, ensuring compatibility with the selected Octave functions.
 - Explore Octave's documentation to gain insights into the functionalities of the selected control system functions.

Conclusion:

- Ensure that the implemented functions in Scilab replicate the desired control system functionalities as seen in Octave.
- Provide clear documentation for each function, outlining usage and expected outputs.
- Test thoroughly to guarantee the accuracy and reliability of the implemented functions.
- If we find that your work is plagiarized or if any two submissions are identical, you will be disqualified.

• Procedure to submit:

- Create a folder on your google drive and share the drive link with this account: contact@scilab.in
- The folder name should have this format: Yourname_CStoolboxfunction
- Inside the main folder, create a separate folder for each function.
- o Inside each respective function folder you should have:
 - 1) .sce file

- 2) Dependency file (if any)
- 3) README file
- Submission:

Fill out this form to review your submission. Failure to do so will result in your submission being rejected.

Link:

https://docs.google.com/forms/d/e/1FAIpQLSeForGHeITXTM1ULim2wPdtwif4ESDea5uj TzpesBI1WEIMcg/viewform