

HW5- Implement Bankers Algorithm

For this lab you can use 'C program' or any higher-level programming language.

1. Develop an interactive program that first reads the description of a system from the command line or from a file. The description consists of the number of processes, the number of resources, the numbers of units within each resource, and the maximum claims of each process. (Can be tested with different inputs).
2. Using the given information, the program creates the current representation of the system (the set of arrays).
3. The program then enters an interactive session during which the user inputs **i**, **j** and **k** to request in the form: request (**i**, **j**, **k**)

where **i** is a process number, **j** is a resource number, and **k** is the number of units of R_j the process p_i is requesting.

For each request operation, the program responds whether the request has been granted or denied and the safe sequence if granted.

4. Demonstrate the functioning of the banker's algorithm by inputting a sequence of requests. Use the logic of Banker's algorithm as explained in class.
5. Output should include the initial matrix, matrix after checking safe sequence, the safe sequence and message showing granted or denied.

What to submit:

1. The Program
2. Screen Shorts showing the execution (show each step including user entry) of the program and the output.