BANKER ALGORITHM WITH GUI

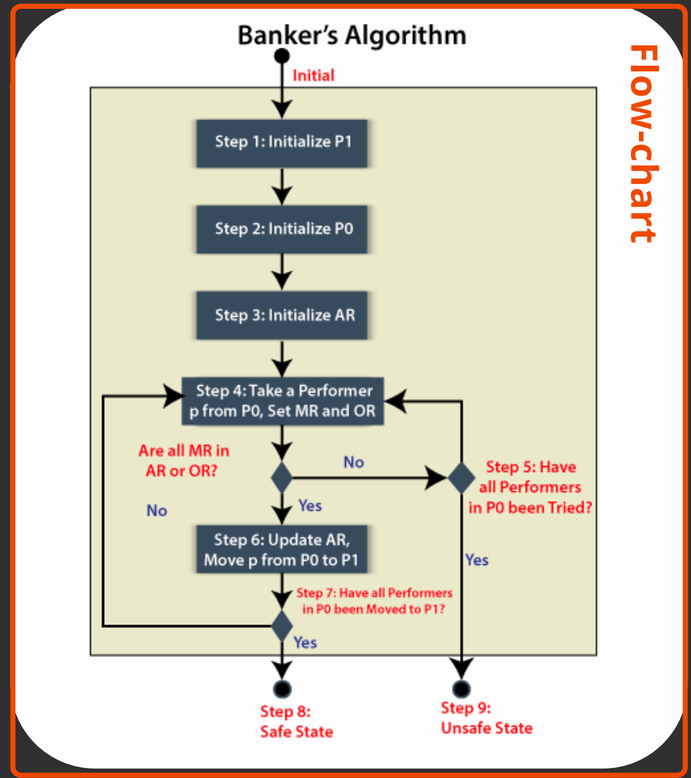
Abstract

We have used the Tkinter library to create a graphical user interface for the Banker's Algorithm, which is a resource allocation and deadlock avoidance algorithm commonly used in operating systems. The user is prompted to enter the number of processes and resources, and then the maximum available resources, allocated resources, and maximum resource needs for each process are inputted through Entry widgets.

After the user inputs all the required information, the Compute function is executed, which calculates whether the system is in a safe state or not.

It checks if the allocated resources for each process are less than or equal to the maximum resource needs for that process and also whether the total allocated resources are less than or equal to the maximum available resources. If these conditions are met, the system is in a safe state and can continue to allocate resources to the processes. Otherwise, the system is in an unsafe state and a message is displayed to the user.

Flow-chart



Technologies

python and tkinter library of python for generation of gui

Team Mates

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Output