Faculty of Engineering
Ain Shams University
Electrical Department

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Section: 1

Operating Systems _Assignment

The Banker's Algorithm

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Cairo 2021

Faculty of Engineering
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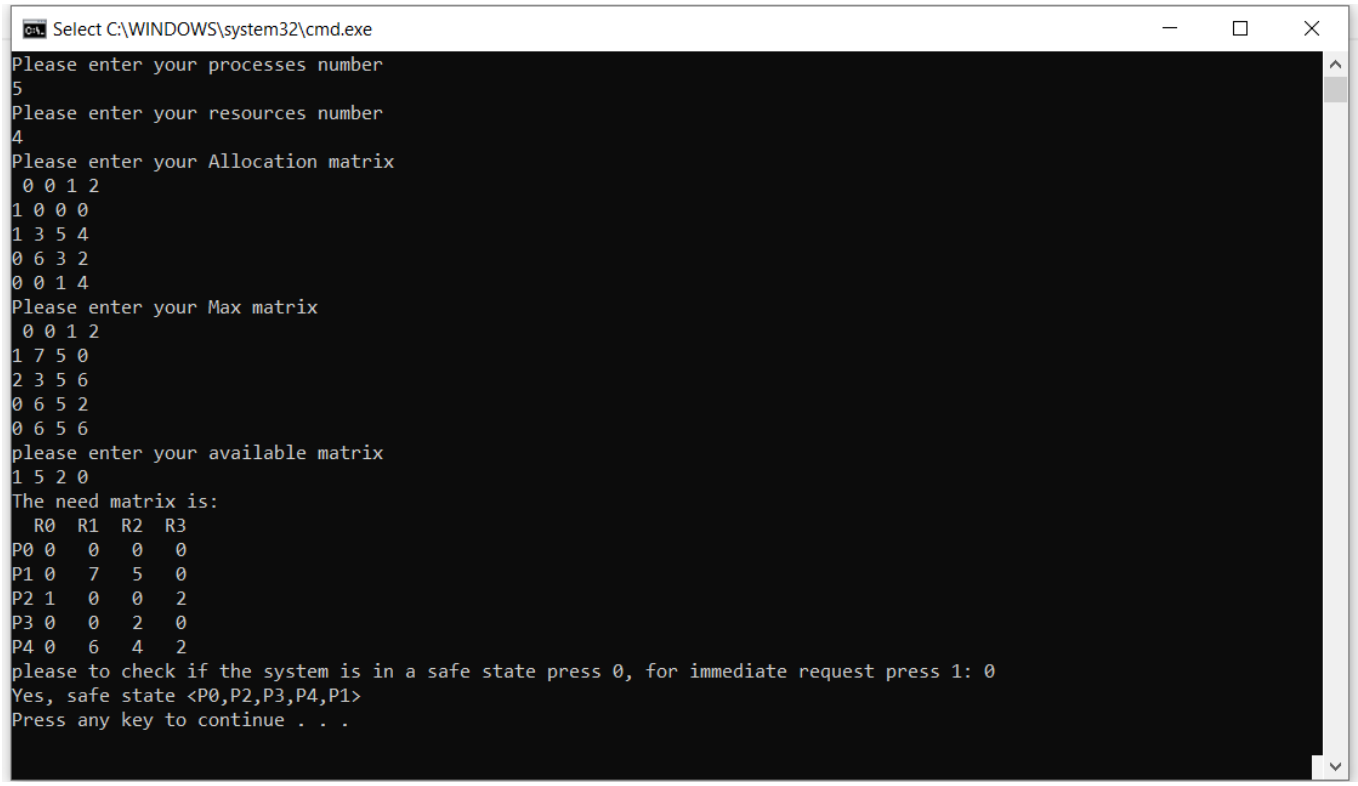
Contents

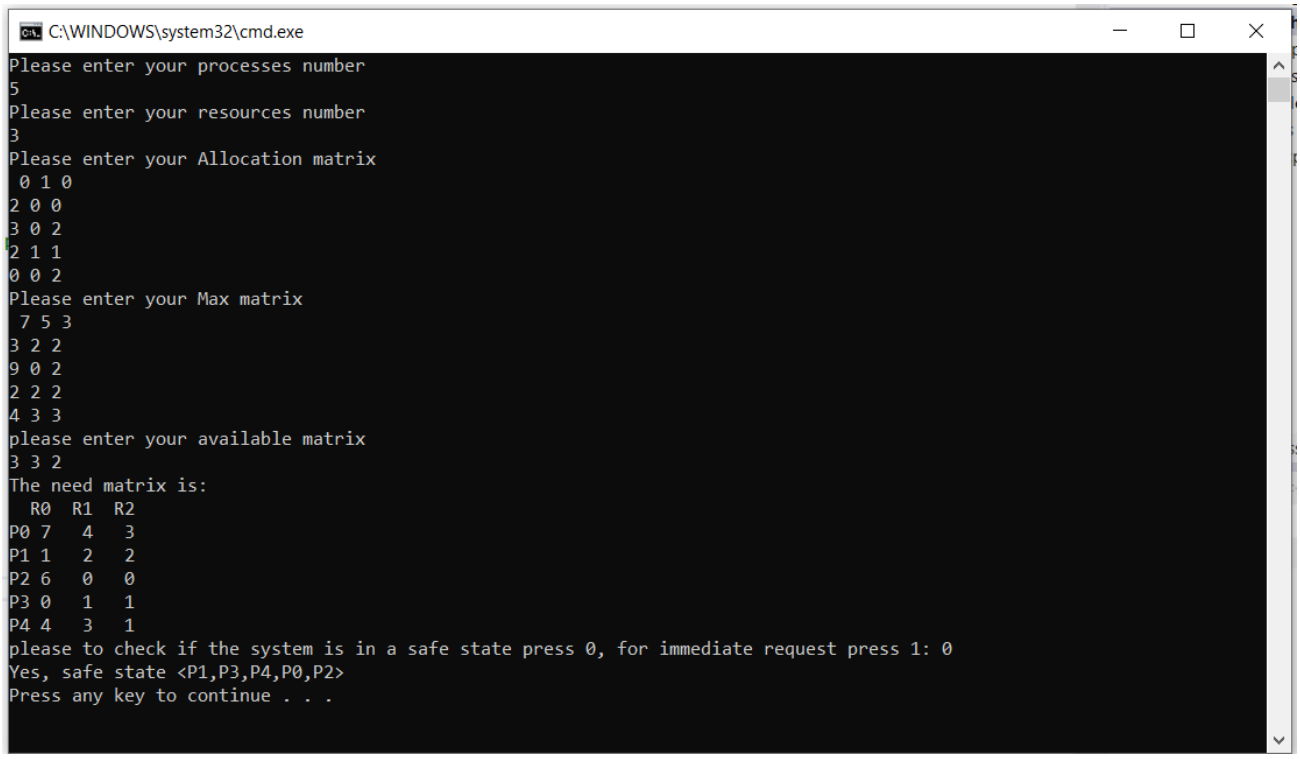
1. Screenshots of examples

1.1Safe state enquiry

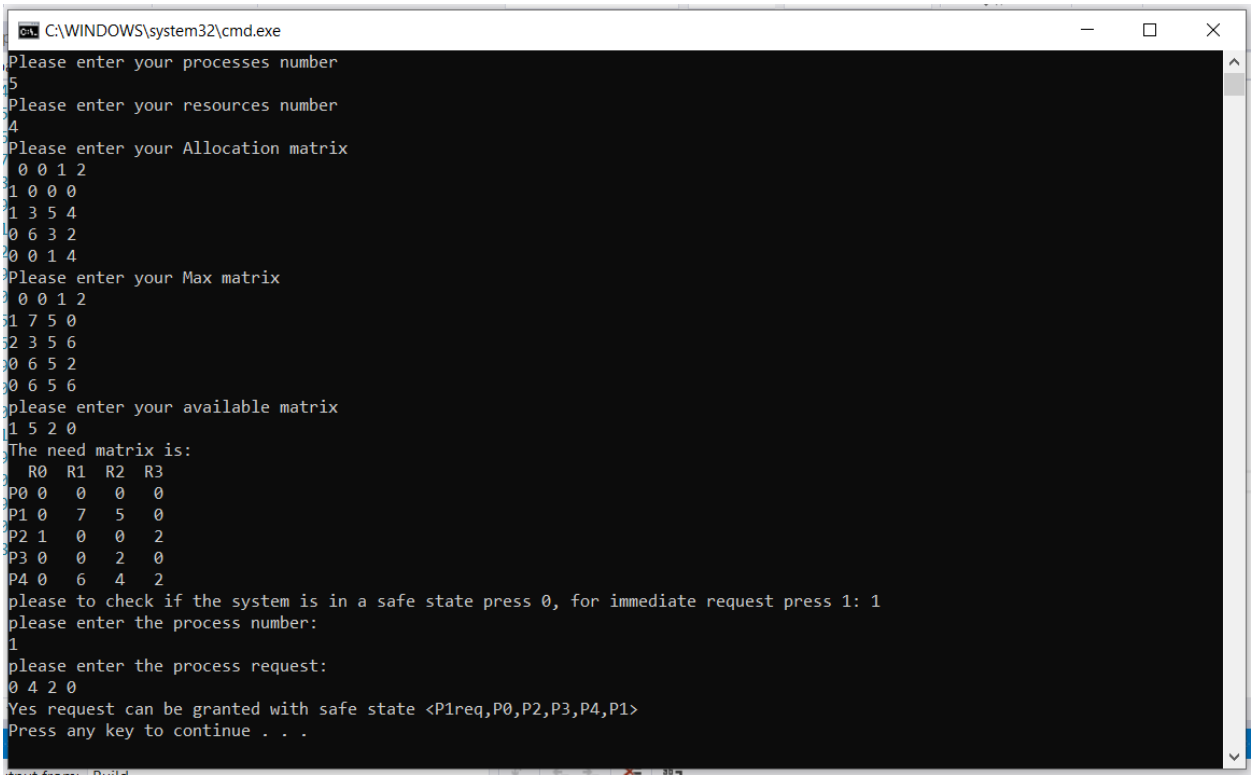
1.1.1 Example1



1.1.2 Example2

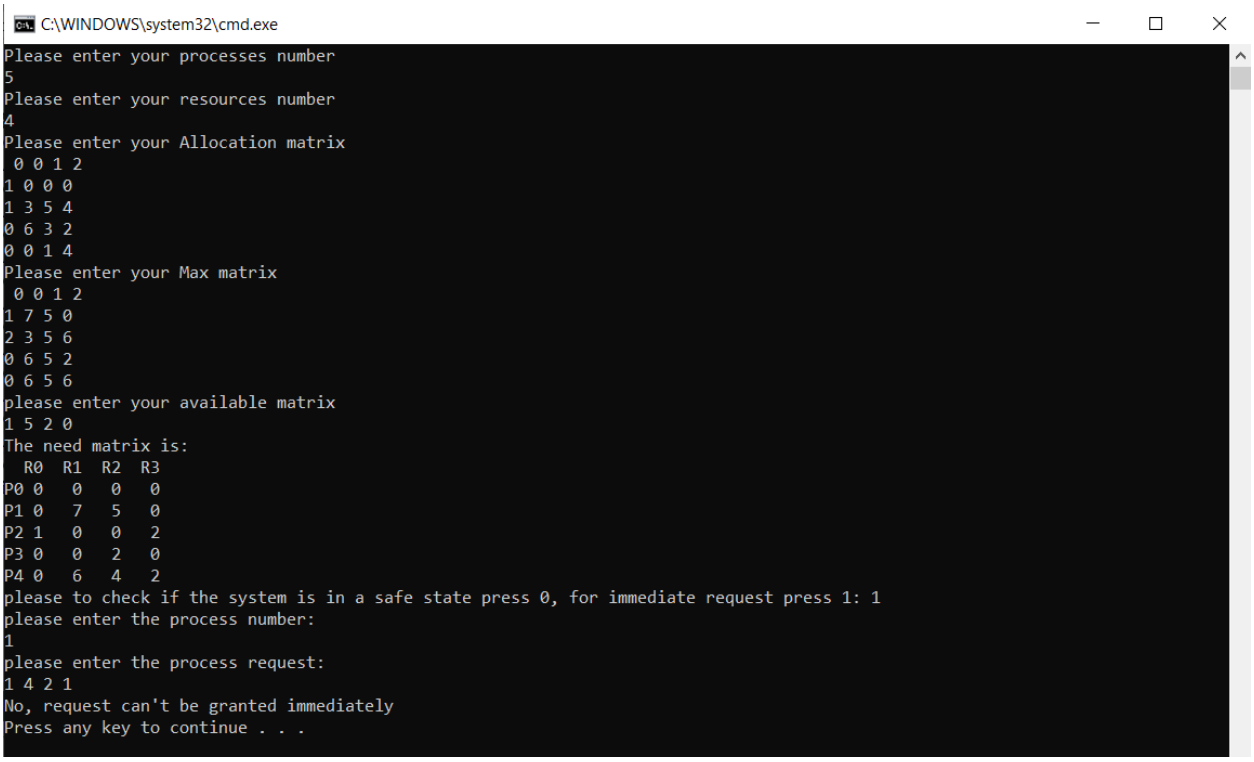


1.2 Immediate request enquiry

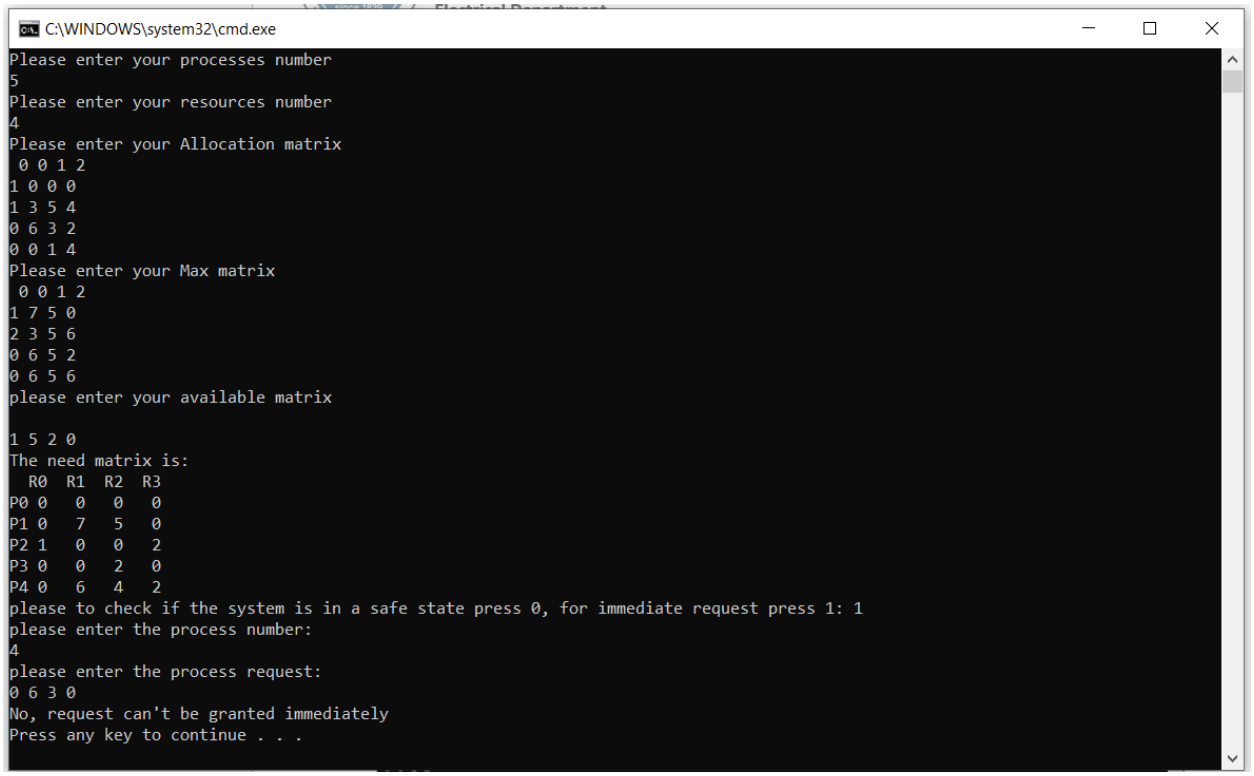


1.3 Immediate request enquiry without granting immediately

1.3.1 Example1



1.3.2 Example2 “another process request”



2. Notes

- Language used: **C++.**
- Each element in the matrix “while scanning” is separated with space.
- We get the number of processes and resources, allocation matrix, and the Max matrix. Then the need matrix is printed and the user can enquiry if the system is in a safe state or a certain immediate request by one of the processes can be granted. According to the user enquiry the required result will be printed.
- Input examples are provided in the working files

3. Working files

You can find the working files in the link below:

- https://drive.google.com/drive/folders/1voZAiT7a0cIhlb7N3D3HgT74tkJV8dRn?usp=sharing

Each one separately:

- Executable file:
  https://drive.google.com/file/d/1--Vg_mpKahRn0wTA27dYNtfUk7MgfVpq/view?usp=sharing

- Code files:
  https://drive.google.com/file/d/16YnoFDKgv10sHe7IbKM0TleAm4LiK4kM/view?usp=sharing

- Input examples:
  https://drive.google.com/file/d/1dcA-ufQMztrtTbN4qLPLA5ALrRqT5ZYi/view?usp=sharing

- Algorithm as a text file:
  https://drive.google.com/file/d/1s0WH-y3PMHGAnUSZ-6JRKNDuuT3FZ9fc/view?usp=sharing