

- 8) We wish to do 3 jobs on a computer system. These jobs require different configurations of machinery. The cost required to switch the machinery from job i to job j is c_{ij} and is given in row i and column j

$$\begin{matrix} & \begin{matrix} 1 & 2 & 3 \end{matrix} \\ \begin{matrix} 1 \\ 2 \\ 3 \end{matrix} & \begin{pmatrix} - & 6 & 8 \\ 4 & - & 11 \\ 12 & 3 & - \end{pmatrix} \end{matrix}$$

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(a) calculate the cost of each possible order.

(b) Which order is cheapest?

- 9) A filing cabinet contains files on n people. The files are in no particular order, but do appear in succession: one, then the next, then the next, ...
When given one of the names of file, the clerk opens the cabinet, checks one name at a time, starting at the beginning, until he finds the file in question.

(a) In the worst case, how many files will the clerk consider before finding the desired file?

(b) In the average case, how many files will the clerk consider before finding the desired file?

10) How many functions are there which assign a number c or a number 1 to each $m \times n$ matrix of 0 's and 1 's?