

## MAT2003 (Optimization Techniques) Lab-5

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Topic : Assignment method

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%% KHAN MOHD OWAIS RAZA (20BCD7138)
%% Optimization Techniques (MAT2003) Lab
%% Date: 6th October 2022

%% Topic: Assignment Method
% A company has 5 jobs to be done on five machines. Any job can be done
% on any machine. The cost of doing the jobs on different machines are
% given below. Assign the jobs for different machines so as to minimize
% the total cost.
% Jobs      Machines
% -----
%          A   B   C   D   E
% -----
% 1      13   8   16  18  19
% 2       9  15  24   9  12
% 3      12   9   4   4   4
% 4       6  12  10   8  13
% 5      15  17  18  12  20

clc;
clear all;
C=[13 8 16 18 19;9 15 24 9 12;12 9 4 4 4;6 12 10 8 13;15 17 18 12 20];
M = matchpairs(C,1000)
MinCost = sum(C(sub2ind(size(C), M(:,1), M(:,2)))))
```

Assignment\_Method\_OT\_Lab.m

Command Window

M =

4	1
1	2
3	3
5	4
2	5

MinCost =

42

>> |