HW 4

1. A manager will assign 7 jobs to 7 machines. The cost of finishing a job by machines is given in the table below.

Job	Machines						
	1	2	3	4	5	6	7
A	85$	70	60	10	40	23	50
B	6	15	90	76	50	32	65
C	50	80	5	75	15	46	60
D	75	84	82	25	30	53	65
E	20	24	30	14	35	22	40
F	43	56	27	38	29	35	30
G	34	25	44	48	37	38	54

Make an assignment for the minimum total cost. (use Python or Excel Solver)

2. A company has two plans located in Istanbul, one of them is in the European side and the other is in the Anatolian side of Istanbul. Company delivers the product to markets via two warehouses. Table below shows the capacities of the plants and the warehouses and the demands of markets. According to the table given find the minimum shipping cost and routes.

			warehouse		Markets	demand
					Kayseri	1250
supply	Plants: Istanbul			capacity		
5000 (box)	Anatolian side		Ankara	4500	Sivas	3000
					Mersin	4200
7500	European side		Adana	8000		
					Niğde	2800
					Erzurum	1000

Shipping costs (TL, per box)

	Ankara	Adana
Anatolian side	1	3
European side	2	3

	Kayseri	Sivas	Mersin	Niğde	Erzurum
Ankara	2	2	4	3	4
Adana	3	4	1	1	1