HW#04

(1) Five jobs may be processed on any of the five machines available. The profit from any machine processing any job is given below

Machine \ Job	I	II	III	IV	V
A	32	38	40	28	40
B	40	24	28	21	36
C	41	27	33	30	37
D	22	38	41	36	36
E	29	33	40	35	39

(a) What is the optimum assignment that maximizes the profit?

(b) What happens if ~~fourth~~ first job can not be assigned to second machine

Ans: Maximum profit 191

Ans (a) A → II, B → I, C → V, D → III, E → IV

(2) Find the initial basic feasible solution of the following transportation problem (i) by North-West corner rule
(ii) Lower cost method
(iii) Vogel's method

	A	B	C	D	E	a_i
I	3	4	6	8	8	20
II	2	10	1	5	30	36
III	7	11	20	40	15	15
IV	2	1	9	14	18	13
b_j	40	6	8	18	6	