END3760 Scheduling Homework

There is a 5 jobs 3 machines flow shop problem.

	M1	M2	M3
J1	27	10	8
J2	12	9	10
J3	11	10	8
J4	8	13	12
J5	14	12	9

The processing times of the jobs are given.

1. Try to develop a new heuristic methodology to solve the flow shop problem.
   Explain the idea and basis of your methodology. (10 p)
   Show the steps and solution algorithm of your methodology. (20 p)
   Solve the problem with your proposed methodology and find the sequence and Cmax according to your proposed methodology. (40 p)
2. Find the optimal solution of the problem. (20p)
3. Compare the optimal result with your proposed methodology and calculate the effectiveness of your proposed methodology. (10p)