Homework Assignment: 3 Name: Jonathan Gaines

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## 1. Job Optimization

	Solution	Time Slot 1	Time Slot 2	profit
	1	Job 1	Job 3	55
(a)	2	Job 3	Job 1	55
	3	Job 2	Job 1	65
	4	Job 2	Job 3	60
	5	Job 4	Job 1	70
	6	Job 4	Job 3	65

- (b) The optimal schedule has Job 4 in timeslot 1 and Job 1 in timeslot 2.
- (c)
- 2. Dynamic Programming: Change Making
  - (a)
  - (b)
  - (c)
  - (d)
- 3. Dyanmic Programming: Knapsack Problem
  - (a)
  - (b)
  - (c)
- 4. Greedy Algorithm
  - (a)
  - (b)
  - (c)