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Section 1

HW 8

**Problem 1 part 1**

Dependence =  $a(i)$  and  $a(i-1)$

Distance = 1

Type = Flow

Dependence =  $a(i)$  and  $a(i+1)$

Distance = -1

Type = Anti

Dependence =  $a(i)$  and  $a(i-2)$

Distance = 2

Type = Flow

**Problem 1 part 2**

Dependence =  $a(i)$  and  $a(i+2)$

Distance = -2

Type = Anti

Dependence =  $a(i)$  and  $a(i-3)$

Distance = 3

Type = Flow

**Problem 1 part 3**

Dependence =  $a(2*i)$  and  $a(2*i-1)$

Distance = 1

Type = Flow

Dependence =  $a(2*i)$  and  $a(2*i+1)$

Distance = -1

Type = Anti

**Problem 1 part 4**

Dependence =  $a(i)$  and  $a(5)$

Distance =  $i-5$

Type = Anti for  $i \leq 4$ , Output for  $i=5$ , Flow for  $i > 5$

**Problem 1 part 5**

Dependence =  $a(10-i)$  and  $a(i)$

Distance =  $10 - 2i$

Type = Anti

**Problem 2 part 1**

S1 depends on S2 (Flow) and S1 depends on S3 (Anti)

S2 depends on S3 (Output)

S3 depends on itself (Flow) and S3 depends on S1 (Output)

**Problem 2 part 2**

$$a(2:99) = b(1:98) + c(3:100);$$

$$b(2:99) = c(2:99) + 3;$$

$$c(2:99) = c(1:98) + a(2:99);$$