

# Data Structure HW6

## 1

Iteration	Vertex selected	d[A]	d[B]	d[C]	d[D]	d[E]	d[F]
Initial		0	Inf	Inf	Inf	Inf	Inf
1	A	0	4	2	Inf	Inf	Inf
2	C	0	4	2	Inf	5	Inf
3	B	0	4	2	14	5	Inf
4	E	0	4	2	9	5	Inf
5	D	0	4	2	9	5	20

## 2

	1	2	3	4
1	0	5	$\infty$	$\infty$
2	$\infty$	0	1	$\infty$
3	8	$\infty$	0	3
4	2	$\infty$	$\infty$	0

k = 1

	1	2	3	4
1	0	5	$\infty$	$\infty$
2	$\infty$	0	1	$\infty$
3	8	13	0	3
4	2	7	$\infty$	0

k = 2

	1	2	3	4
1	0	5	6	$\infty$
2	$\infty$	0	1	$\infty$
3	8	13	0	3
4	2	7	8	0

k = 3

	1	2	3	4
1	0	5	6	9
2	9	0	1	4
3	8	13	0	3
4	2	7	8	0

k = 4

	1	2	3	4
1	0	5	6	9
2	6	0	1	4
3	5	10	0	3
4	2	7	8	0

3

(A)

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(B)

Subtask	e1	e2	e3	e4	e5	e6	e7	e8	e9
Earliest start time	0	0	0	3	4	2	9	15	9
Latest start time	3	1	0	6	5	2	9	15	9

(C)

e3 e6 e7 e8 e9

It means these subtasks need start immediately when it could start.