

SQA Assignment 3 Solution – Spring 2016

Problem 1:

DEF –USE Table:

Variable	DEF	USE
X	5, 7, 17, 24	12, 15, 18, 19, 22, 25, 26, 29, 35
Y	5, 8, 31	12, 15, 17, 22, 24, 32, 35
Z	5, 9, 14, 19, 25, 32	22, 24, 29, 31, 35
W	5, 10, 15, 18, 26	19, 25, 32, 35

DU Path Table:

Variable	#	DU Path
X	1	7-12
	2	7-12-15
	3	7-12-14-15-22
	4	7-12-14-15-22-29
	5	7-12-14-15-22-29-35
	6	17-18
	7	17-18-19
	8	17-18-19-22
	9	17-18-19-22-29
	10	17-18-19-22-29-35
	11	24-25
	12	24-25-26
	13	24-29
	14	24-29-35
Y	1	8-12
	2	8-12-15
	3	8-12-17
	4	8-12-22
	5	8-12-22-24
	6	8-12-22-29-35
	7	31-32
	8	31-35
Z	1	14-22
	2	14-22-24
	3	14-22-29
	4	14-22-29-31
	5	14-22-29-35
	6	19-22
	7	19-22-24
	8	19-22-29

	9	19-22-29-31
	10	19-22-29-35
	11	25-29
	12	25-29-31
	13	25-29-35
	14	32-35
W	1	15-22-25
	2	15-22-29-32
	3	15-22-29-35
	4	18-19
	5	18-19-22-25
	6	18-19-22-29-32
	7	18-19-22-29-35
	8	26-29-32
	9	26-29-35

Problem 2:

DEF –USE Table:

Variable	DEF	USE
furniture	5, 11	16
food	6, 13	16
kitchen	7, 15	16
Total	8, 16	17, 18, 19, 21, 23, 25
FinalMoney	9, 18, 21, 25	28

DU Path Table:

Variable	#	DU Path
furniture	1	11-16
food	1	13-16
kitchen	1	15-16
Total	1	16-17
	2	16-17-18
	3	16-17-19
	4	16-17-19-21
	5	16-17-19-23
	6	16-17-19-23-25
FinalMoney	1	9-11-13-15-16-17-19-23-27-28
	2	18-19-23-27-28
	3	21-23-27-28
	4	25-27-28