

Matrix 1

id	V1	V3	V4	V6	V2	V5
label	a	a	d	d	b	c
V1	0	0	0	0	x	0
V3	0	0	0	0	u	0
V4	0	0	0	0	0	y
V6	0	0	0	0	0	w
V2	x	u	0	0	0	z
V5	0	0	y	w	z	0

Matrix 1:

Matrix 2

id	V3	V1	V4	V6	V2	V5
label	a	a	d	d	b	c
V3	0	0	0	0	u	0
V1	0	0	0	0	x	0
V4	0	0	0	0	0	y
V6	0	0	0	0	0	w
V2	u	x	0	0	0	z
V5	0	0	y	w	z	0

Matrix 2:

Matrix 5

id	V6	V4	V1	V3	V2	V5
label	d	d	a	a	b	c
V6	0	0	0	0	0	w
V4	0	0	0	0	0	y
V1	0	0	0	0	x	0
V3	0	0	0	0	u	0
V2	0	0	x	u	0	z
V5	w	y	0	0	z	0

Matrix 5:

Matrix 7

id	V4	V6	V1	V3	V2	V5
label	d	d	a	a	b	c
V4	0	0	0	0	0	y
V6	0	0	0	0	0	w
V1	0	0	0	0	x	0
V3	0	0	0	0	u	0
V2	0	0	x	u	0	z
V5	y	w	0	0	z	0

Matrix 7:

000x000u000y0wz

Matrix 3

id	V1	V3	V6	V4
label	a	a	d	d
V1	0	0	0	0
V3	0	0	0	0
V6	0	0	0	0
V4	0	0	0	0
V2	x	u	0	0
V5	0	0	w	y

000u000x000y0wz

Matrix 4

id	V3	V1	V6	V4
label	a	a	d	d
V3	0	0	0	0
V1	0	0	0	0
V6	0	0	0	0
V4	0	0	0	0
V2	u	x	0	0
V5	0	0	w	y

0000w000y0x0u0z

Matrix 6

id	V6	V4	V3	V1
label	d	d	a	a
V6	0	0	0	0
V4	0	0	0	0
V3	0	0	0	0
V1	0	0	0	0
V2	0	0	u	x
V5	w	y	z	0

0000y000w0x0u0z

Matrix 8

id	V4	V6	V3	V1
label	d	d	a	a
V4	0	0	0	0
V6	0	0	0	0
V3	0	0	0	0
V1	0	0	0	0
V2	0	0	u	x
V5	y	w	0	0

V2	V5
b	c
x	0
u	0
0	w
0	y
0	z
z	0

Matrix 3: 000x000u000w0yz

V2	V5
b	c
u	0
x	0
0	w
0	y
0	z
z	0

Matrix 4: 000u000x000w0yz

V2	V5
b	c
0	w
0	y
u	0
x	0
0	z
z	0

Matrix 6: 0000w000y0u0x0z

V2	V5
b	c
0	y
0	w
u	0
x	0
0	z
z	0

Matrix 8: 0000y000w0u0x0z

All Possible Combinations

12axc	23cyb	34bza	45ayc
12cxa	13cyb	34bza	45ayc
12cyb	23bza	34ayc	15cxa
12byc	23cxa	14bza	45ayc
12azb	23byc	34cxa	15ayc
12bza	23ayc	14byc	45cxa
12ayc	13azb	34byc	45cxa
12cya	23azb	34byc	45cxa

1st graph *5th level left out for intensive calculation practical reasons

12axd	13axc	13axc	13azb	34cyb	34cyb	34byc	34byc
12dxa	23axc	23axc	23azb	24axc	24axc	24azb	34cyb
12axc	23cyb	13azb	13axc	13axd	34byc	34bza	14axd
12axc	23cyb	13azb	13axc	13axd	34byc	34bza	14axd
12cxa	23axd	23axc	23azb	13cyb	24axc	24azb	14cyb
12cxa	23axd	23axc	23azb	13cyb	24axc	24azb	14cyb
12cyb	23byc	23bza	24bza	34cxa			
12cyb	23byc	23bza	24bza	34cxa			
12byc	23cxa	34axc	34axd	14byc			
12byc	23cxa	34axc	34axd	14byc			
12bza	13byc	13byc	23axd	23axc	23axc	24axd	24axc
12azb	13axd	23byc	23byc	14axc	24byc	24byc	14axc

2nd graph

12dya	23axc			34cyb	
12ayd	13axc			34cyb	
12axc	13ayd	23cyb		24cyb	14ayd
12cxa	23ayd	13cyb		14cyb	24ayd
12cyb	13cxa			34ayd	
12byc	23cxa			34ayd	

14axc	14axc								
34cyb	34byc	34byc							
14axc	34byc	14axc	14axd	14axd	34byc	14axc	14axc	24byc	14azb
14axc	34byc	14axc	14axd	14axd	34byc	14axc	14axc	24byc	14azb
24axd	24azb	14cyb	34cyb	24axd	24axc	34byc			
24axd	24azb	14cyb	34cyb	24axd	24axc	34byc			

14byc	24axc	24axc	14byc	14byc
14axd	14axc	24byc		

3rd graph

12cyb	23bza
12byc	13bza
12abz	23byc

Edge	Support Count
AxD	1
DxA	1
AxC	2
CxA	2
CyB	3
ByC	3
BzA	2
AzB	2
DyA	1
AyD	1