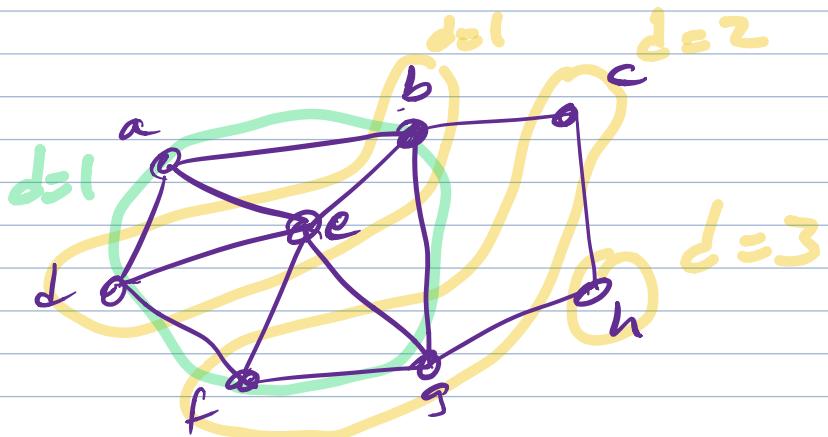


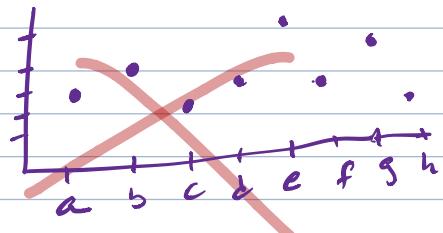
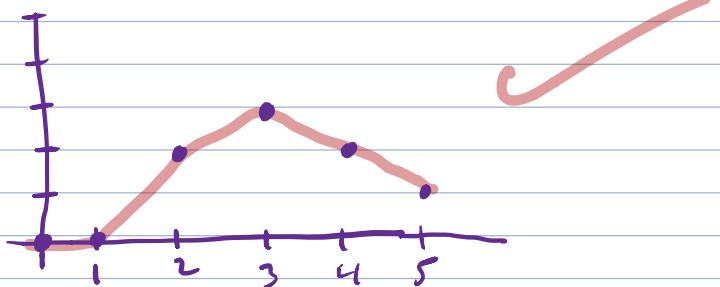
Cercanía:
$$g_{iv} = \frac{1}{\sum d(a, v)}$$



Grado

$$\begin{array}{ll} a: 3 & c: 1 \\ b: 4 & d: 3 \\ e: 5 & f: 3 \\ g: 4 & h: 2 \end{array}$$

distribución de grados



Cercanía

$$g_a = \frac{1}{2}$$

$$g_b = -$$

$$g_c = -$$

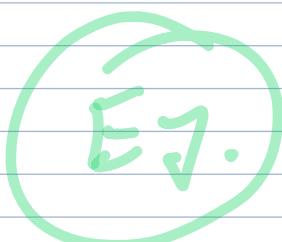
$$g_d = -$$

$$g_e = \frac{1}{9}$$

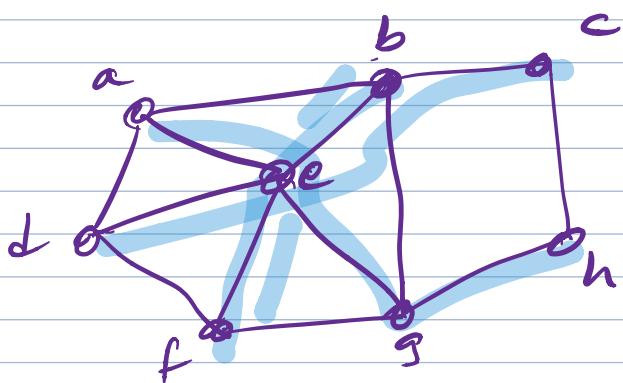
$$g_f = -$$

$$g_g = -$$

$$1+1+1+2+2+2+3 = 3+6+3 = 12$$



$$1+1+1+1+1+2+2 = 9$$



Intermedación

$$S_{ab}(v) = \frac{b_v}{S_{ab}}$$

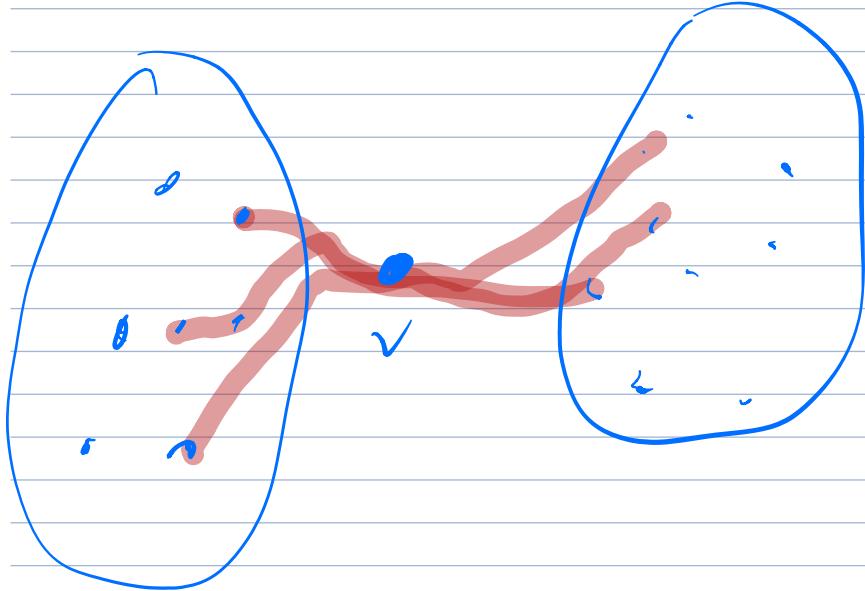
S_{xy}

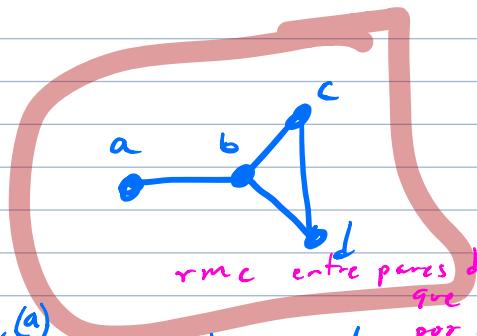
		a	b	c	d	e	f	g	h	y
		a	0	1	1	1	1	2	2	3
x	a	a	1	0	1	2	1	2	1	2
b	b	1	0	1	2	1	2	1	2	
c	c	1	1	0	2	1	3	2	1	
d	d	1	2	2	0	1	1	2	2	
e	e									
f	f									
g	g									
h	h									

num. de rutas
mas cortas entre ven x
col y.
→ sup.
50

$S_{xy}(e)$ $b_e = S_{cf}(e) = 1$

		a	b	c	d	e	f	g	h	
		a	0	0	0	0	1	1	1	$b_e =$
x	a	a	0	0	0	0	0	0	0	
b	b	0								
c	c	0								
d	d	0								
e	e	0								
f	f	0								
g	g	0								
h	h	0								





S_{xy} rmc entre pares de nodos

	a	b	c	d
a	0	1	1	1
b	1	0	1	1
c	1	1	0	1
d	1	1	1	0

$$S_{xy} = 12$$

$S_{xy}(a)$

	a	b	c	d
a	0	0	0	0
b	0	0	0	0
c	0	0	0	0
d	0	0	0	0

$$S_{xy}(a) = 0$$

$S_{xy}(b)$

	a	b	c	d
a	0	0	1	1
b	0	0	0	0
c	1	0	0	0
d	1	0	0	0

$$S_{xy}(b) = 4$$

$S_{xy}(c)$

	a	b	c	d
a	0	0	0	0
b	0	0	0	0
c	0	0	0	0
d	0	0	0	0

$$S_{xy}(c) = 0$$

rmc entre pares de nodos que pasan por d

	a	b	c	d
a	0	0	0	0
b	0	0	0	0
c	0	0	0	0
d	0	0	0	0

$$S_{xy}(d) = 0$$

$$ba = \frac{0}{12} = 0$$

$$bb = \frac{4}{12} = \frac{1}{3}$$

$$bc = \frac{0}{12} = 0$$

$$bd = \frac{0}{12} = 0$$

1. ilustración (present.)

2. networkx (programar)

3. definiciones y dudas.

Ej.

.dot

Buscar las formas de representar (almacenar) (tipos de archivos) una gráfica. (de pref. si lo usa networkx)