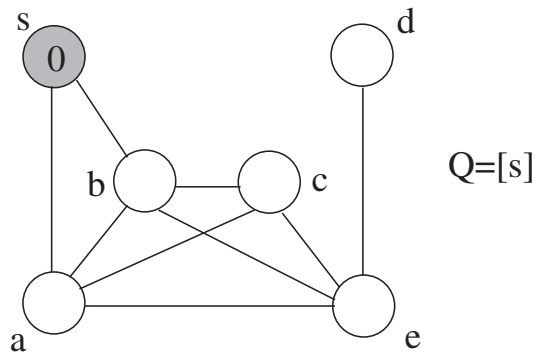p = predecessor
d = distance from s
inf = infinite

BFS Example

Q=[s]

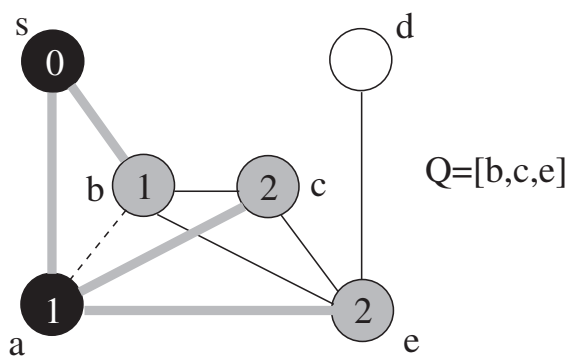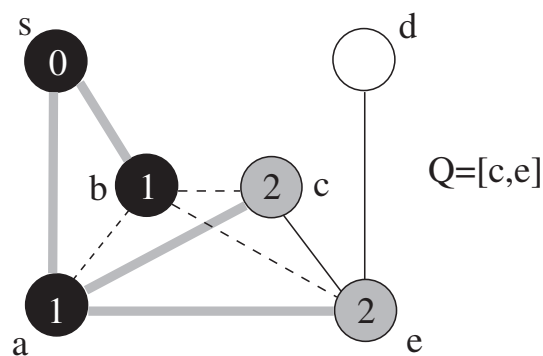| v	adjacent	d	p	color
s	a,b	0	nil	gray
a	s,b,c,e	inf	nil	white
b	s,a,c,e	inf	nil	white
c	b,a,e	inf	nil	white
d	e	inf	nil	white
e	a,b,c,d	inf	nil	white

Q=[a,b]
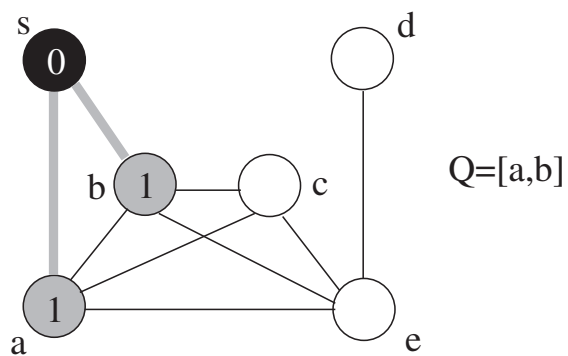
v	adjacent	d	p	color
s	a,b	0	nil	black
a	s,b,c,e	1	s	gray
b	s,a,c,e	1	s	gray
c	b,a,e	inf	nil	white
d	e	inf	nil	white
e	a,b,c,d	inf	nil	white

Q=[b,c,e]

v	adjacent	d	p	color
s	a,b	0	nil	black
a	s,b,c,e	1	s	black
b	s,a,c,e	1	s	gray
c	b,a,e	2	a	gray
d	e	inf	nil	white
e	a,b,c,d	2	a	gray

Q=[c,e]

v	adjacent	d	p	color
s	a,b	0	nil	black
a	s,b,c,e	1	s	black
b	s,a,c,e	1	s	black
c	b,a,e	2	a	gray
d	e	inf	nil	white
e	a,b,c,d	2	a	gray

BFS Example Continued
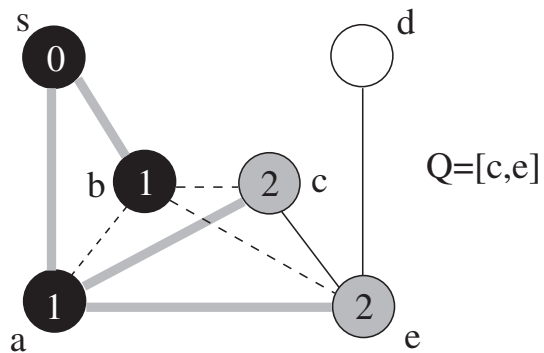
Q=[c,e]

v	adjacent	d	p	color
s	a,b	0	nil	black
a	s,b,c,e	1	s	black
b	s,a,c,e	1	s	black
c	b,a,e	2	a	gray
d	e	inf	nil	white
e	a,b,c,d	2	a	gray

Q=[e]
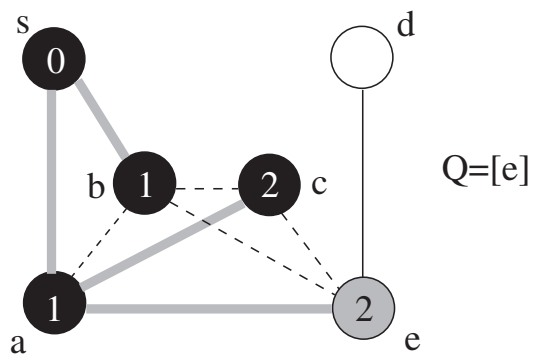
v	adjacent	d	p	color
s	a,b	0	nil	black
a	s,b,c,e	1	s	black
b	s,a,c,e	1	s	black
c	b,a,e	2	a	black
d	e	inf	nil	white
e	a,b,c,d	2	a	gray

Q=[d]
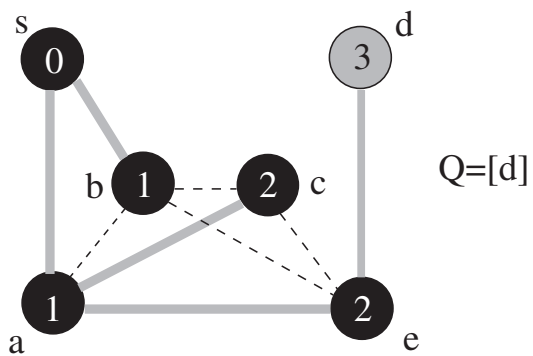
v	adjacent	d	p	color
s	a,b	0	nil	black
a	s,b,c,e	1	s	black
b	s,a,c,e	1	s	black
c	b,a,e	2	a	black
d	e	3	e	grey
e	a,b,c,d	2	a	black

Q=[]
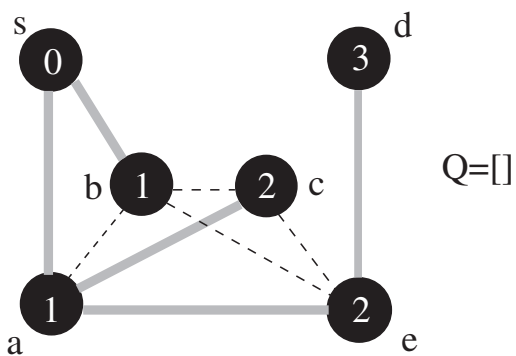
v	adjacent	d	p	color
s	a,b	0	nil	black
a	s,b,c,e	1	s	black
b	s,a,c,e	1	s	black
c	b,a,e	2	a	black
d	e	3	e	black
e	a,b,c,d	2	a	black