

# Breadth First Search

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1 initial step      exploring status 

u						
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Q : (u)      Visited : u



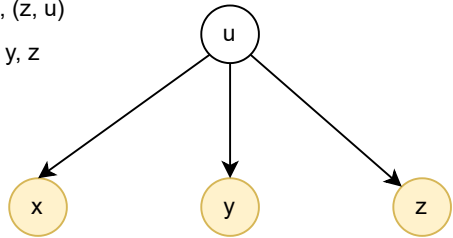
Breadth First Search

2 repeating step      exploring status 

u	x	y	z			
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Q : (x, u), (y, u), (z, u)

Visited : u, x, y, z



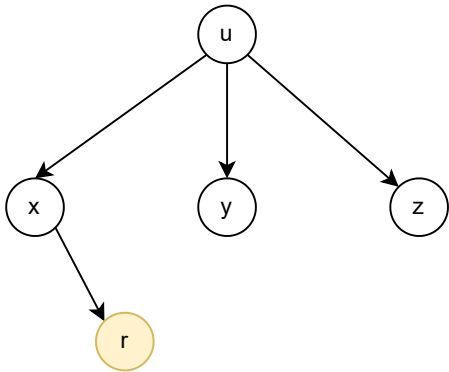
Breadth First Search

3 repeating step      exploring status 

u	x	y	z	r		
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Q : (r, x, u), (y, u), (z, u)

Visited : u, x, y, z, r



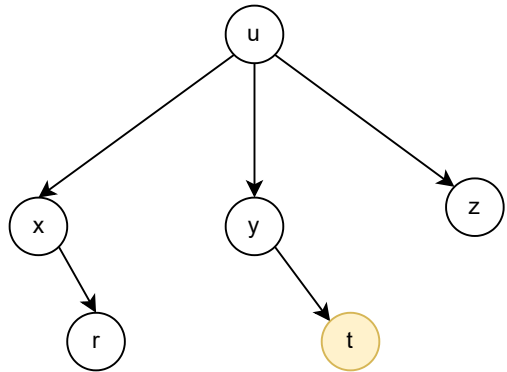
Breadth First Search

4 repeating step      exploring status 

u	x	y	z	r	t	
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Q : (z, u), (r, x, u), (t, y, u)

Visited : u, x, y, z, r, t



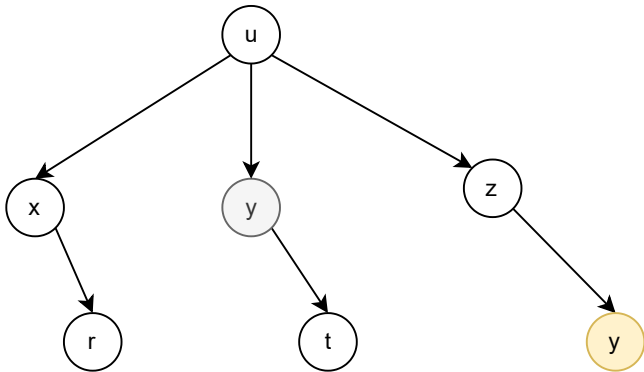
Breadth First Search

5 repeating step      exploring status 

u	x	y	z	r	t	
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Q : (r, x, u), (t, y, u), (y, z, u)

Visited : u, x, y, z, r, t



Breadth First Search

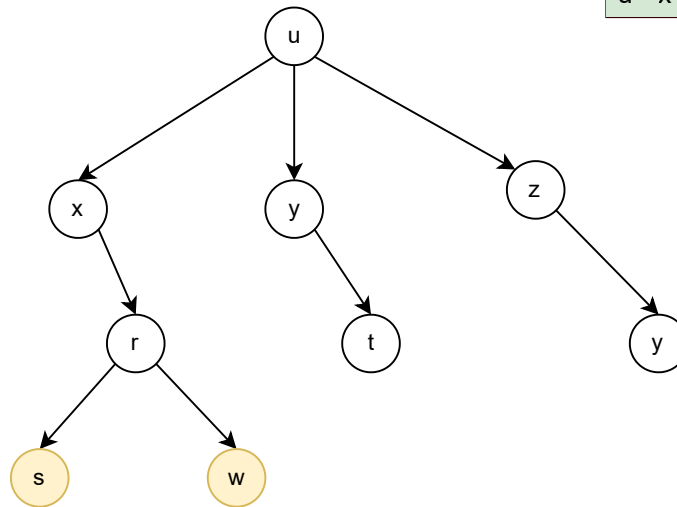
6 repeating step

Q : (t, y, u), (w, r, x, u), (s, r, x, u)

Visited : u, x, y, z, r, t, s, w

exploring status

u	x	y	z	r	t	s	w
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Breadth First Search

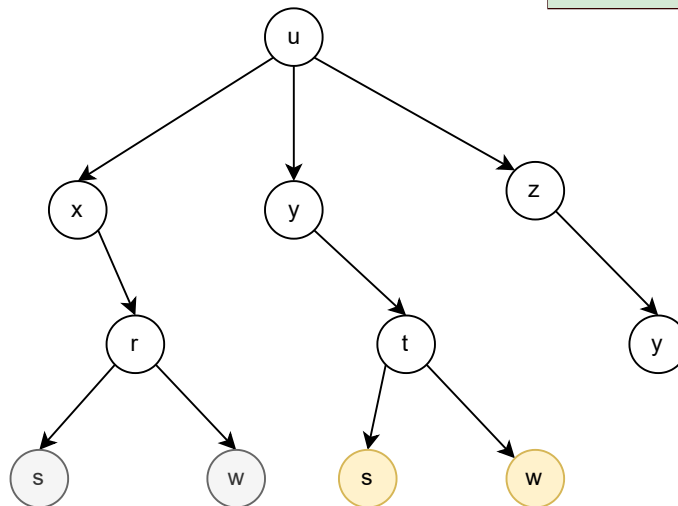
7 repeating step

Q : (w, r, x, u), (s, r, x, u), ~~(s, t, y, u)~~, ~~(w, t, y, u)~~

Visited : u, x, y, z, r, t, s, w

exploring status

u	x	y	z	r	t	s	w
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Breadth First Search

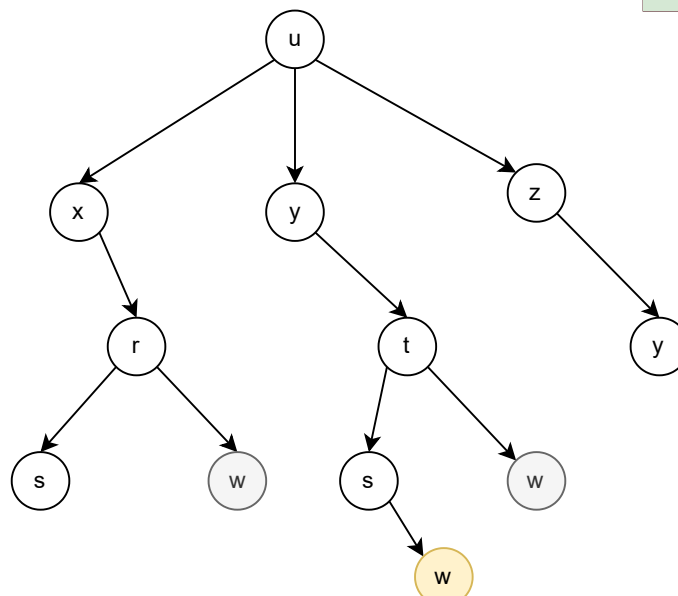
8 repeating step

Q : (w, r, x, u), ~~(s, r, x, u)~~

Visited : u, x, y, z, r, t, s, w

exploring status

u	x	y	z	r	t	s	w
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Breadth First Search

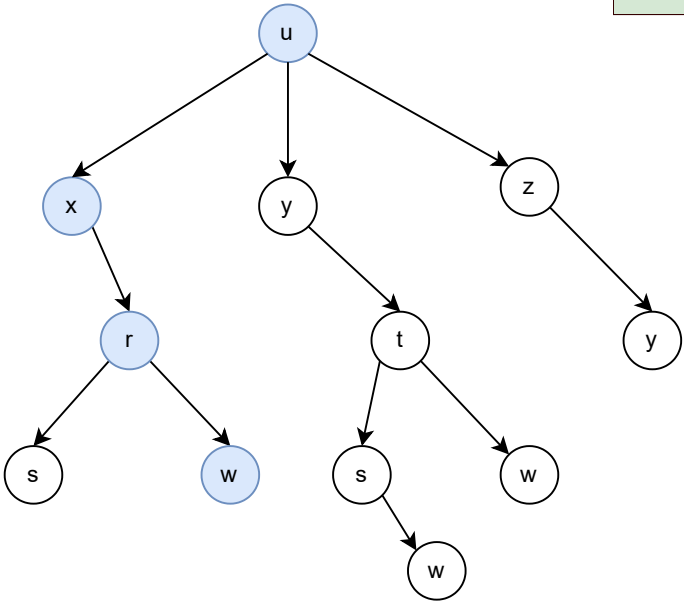
Q : (w, r, x, u)

Visited : u, x, y, z, r, t, s, w

exploring status

u x y z r t s w

path:  
u -> x -> r -> w



Breadth First Search

	Q	V
1	(u)	u
2	(x, u), (y, u), (z, u)	u, x, y, z
3	(r, x, u), (y, u), (z, u)	u, x, y, z, r
4	(z, u), (r, x, u), (t, y, u)	u, x, y, z, r, t
5	(r, x, u), (t, y, u)	u, x, y, z, r, t
6	(t, y, u), (w, r, x, u), (s, r, x, u)	u, x, y, z, r, t, s, w
7	(w, r, x, u), (s, r, x, u)	u, x, y, z, r, t, s, w
8	(w, r, x, u)	u, x, y, z, r, t, s, w