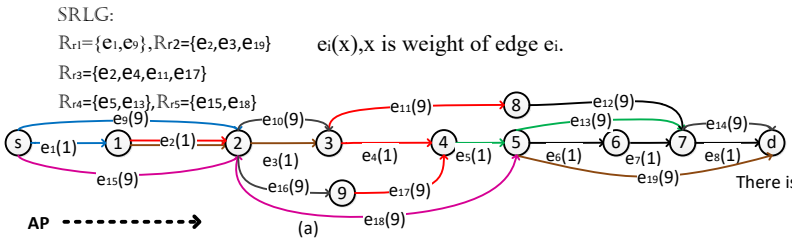
SRLG:

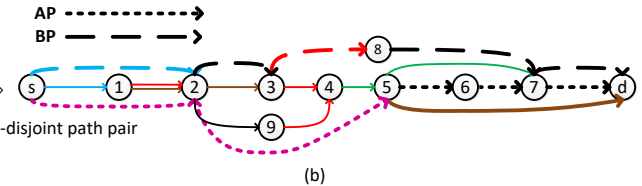
$R_{r1}=\{e_1,e_9\}, R_{r2}=\{e_2,e_3,e_{19}\}$

$R_{r3}=\{e_2,e_4,e_{11},e_{17}\}$

$R_{r4}=\{e_5,e_{13}\}, R_{r5}=\{e_{15},e_{18}\}$

$e_i(x)$,x is weight of edge e_i.



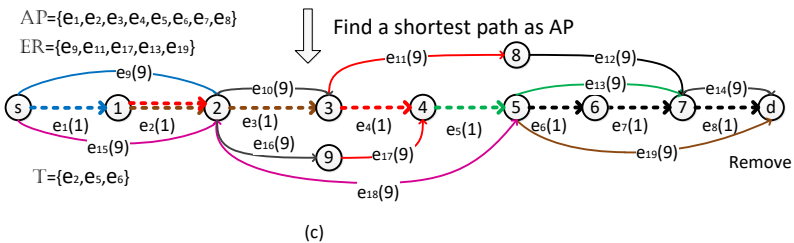


AP

$AP=\{e_1,e_2,e_3,e_4,e_5,e_6,e_7,e_8\}$

$ER=\{e_9,e_{11},e_{17},e_{13},e_{19}\}$

Find a shortest path as AP



Disconnected Graph

Remove edge related with AP