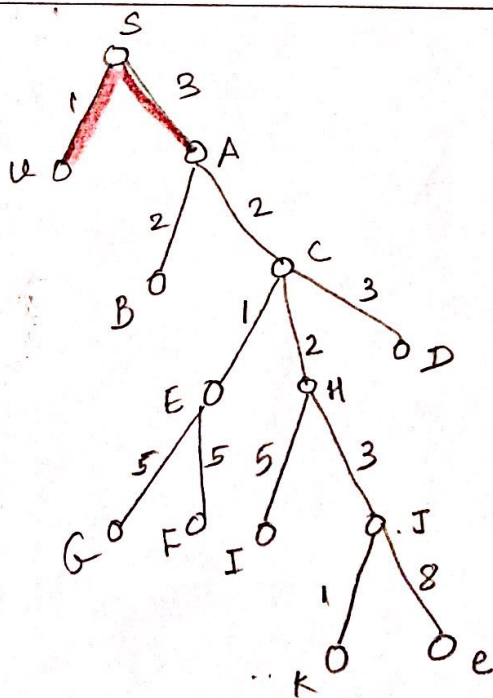


14 vertices

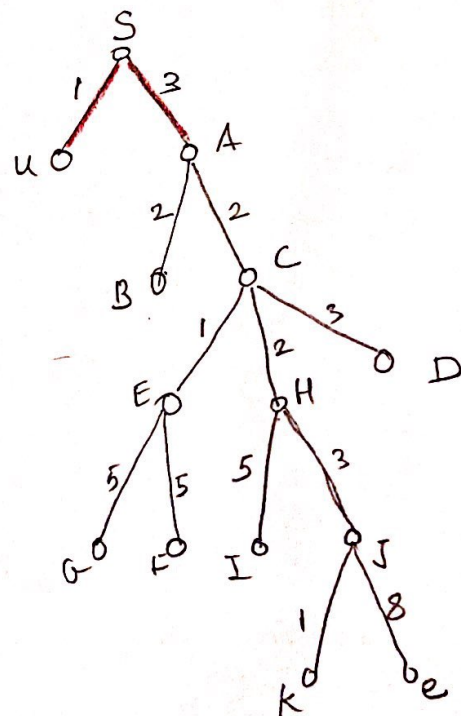
Cycle 1:



0  $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$

S A u B C E H D G F I J K L

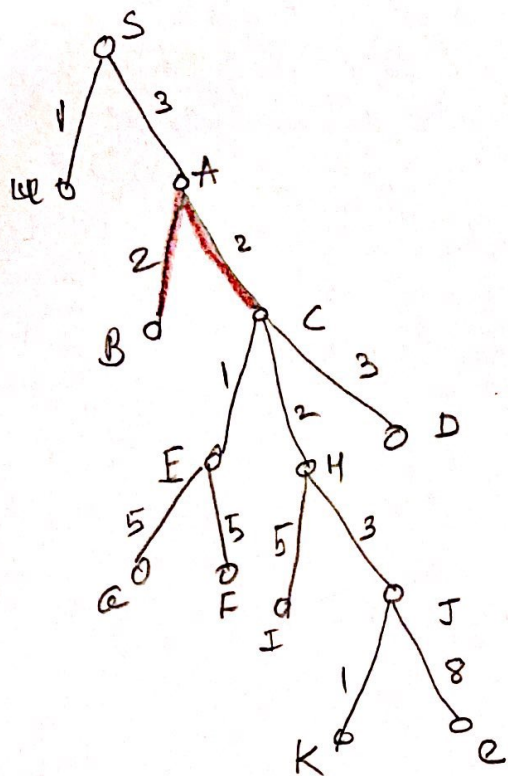
1st Iteration



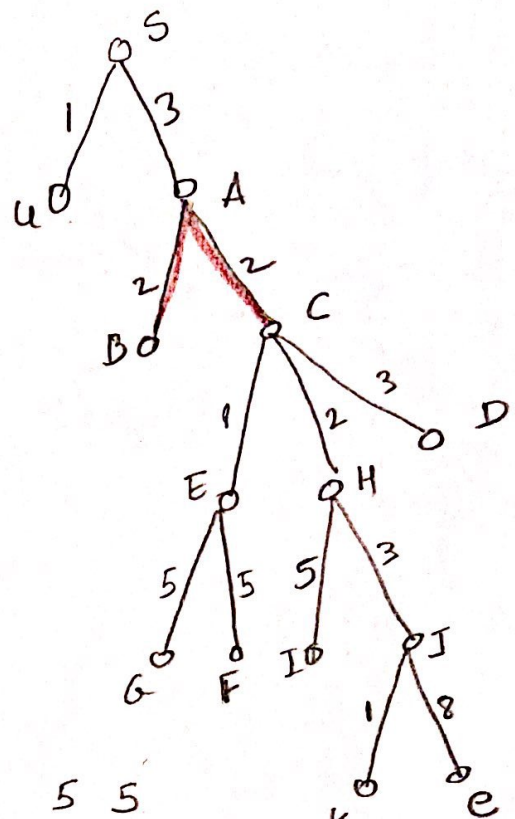
3 1  
0  $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$

S A u B C E H D G F I J K L

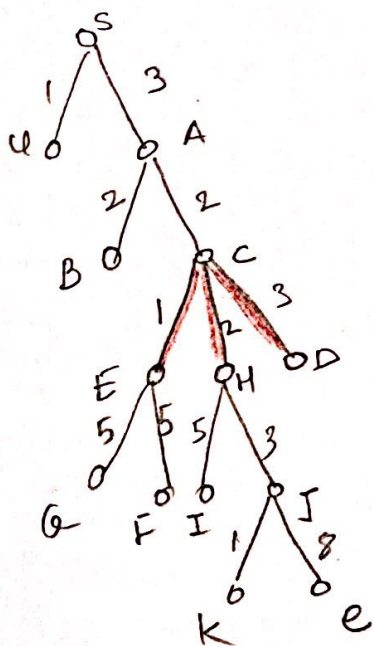
$0+3=3 < \infty$ , A's value is changed to 3  
 $0+1=1 < \infty$ , u's value is changed to 1



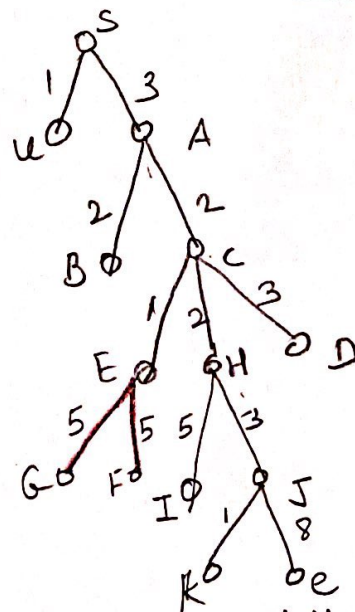
0 1 3  $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   
 S U A B C E H D G F I J K L



5 5  
 0 1 3  $\phi$   $\phi$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   
 S U A B C E H D G F I J K L  
 $3+2=5 < \infty$ , C's value changed to 5  
 B's value changed to 5

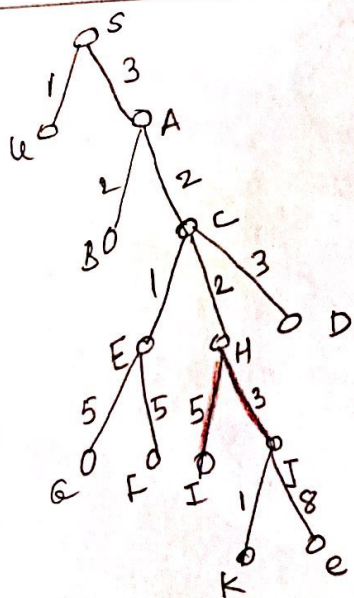


6 7 8  
 0 1 3 5 5  $\phi$   $\phi$   $\phi$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   $\infty$   
 S U A B C E H D G F I J K L  
 $3+2+1=6 < \infty$ , E's value changed to 6  
 $3+2+2=7 < \infty$ , H's value changed to 7  
 $3+2+3=8 < \infty$ , D's value changed to 8



11 11  
 0 1 3 5 5 6 7 8  $\phi$   $\phi$   $\infty$   $\infty$   $\infty$   $\infty$   
 S U A B C E H D G F I J K L  
 $3+2+1+5=11 < \infty$ , G's value changed to 11  
 $3+2+1+5=11 < \infty$ , F's value changed to 11

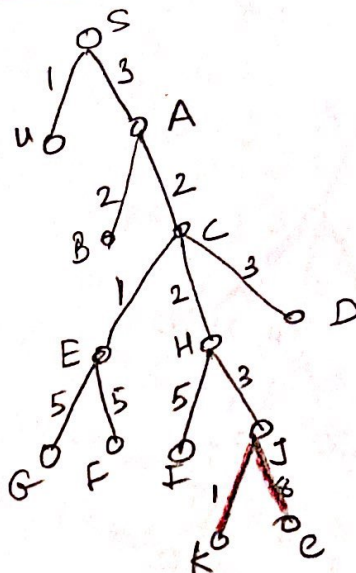




12 10

0 1 3 5 5 6 7 8 11 11  $\phi$   $\phi$   $\infty$   $\infty$   
S u A B C E H D G F I J K e

$3+2+2+5=12 < \infty$ , I's value changed to 12  
 $3+2+2+3=10 < \infty$ , J's value changed to 10

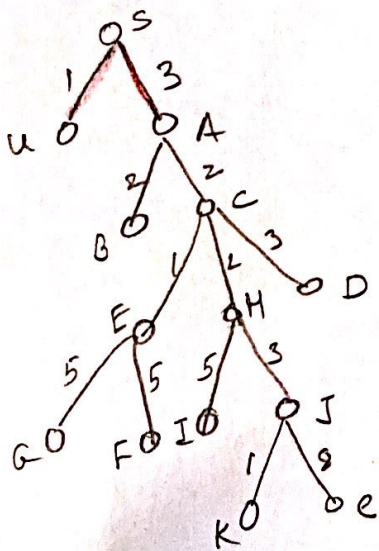


11 18

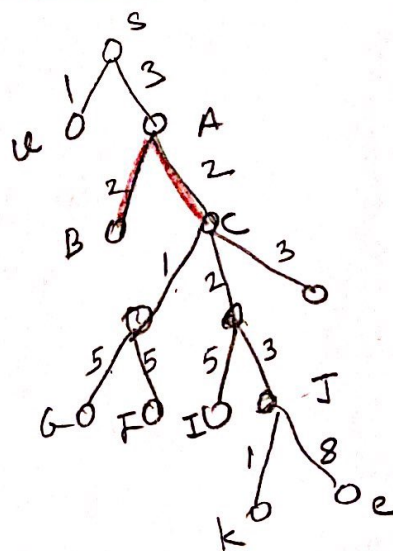
0 1 3 5 5 6 7 8 11 11 12 10  $\phi$   $\phi$   
S u A B C E H D G F I J K e

$3+2+2+3+1=11 < \infty$ , K's value changed to 11  
 $3+2+2+3+8=18 < \infty$ , e's value changed to 18

Cycle 2:

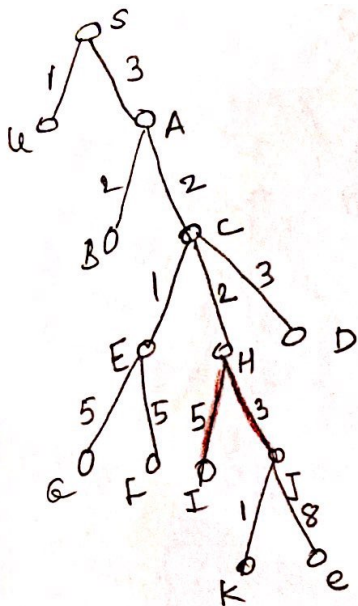


0 1 3 5 5 6 7 8 11 11 12 10 11 18  
S u A B C E H D G F I J K e  
 $0+1=1$ , u's value is not changed  
 $0+3=3$ , A's value is not changed



0 1 3 5 5 6 7 8 11 11 12 10 11 18  
S u A B C E H D G F I J K e

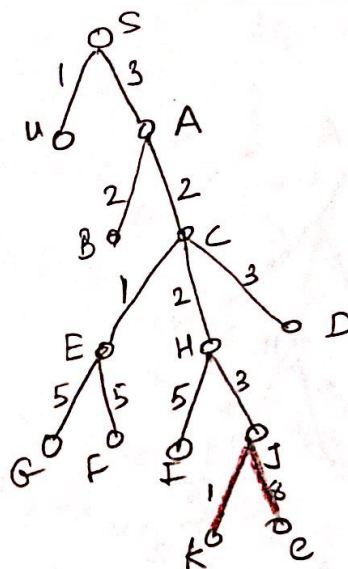
$3+2=5$ , B's value is not changed  
 $3+2=5$ , C's value is not changed



12 10

0 1 3 5 5 6 7 8 11 11  $\phi$   $\phi$   $\infty$   $\infty$   
S u A B C E H D G F I J k e

$3+2+2+5=12 < \infty$ , I's value changed to 12  
 $3+2+2+3=10 < \infty$ , J's value changed to 10

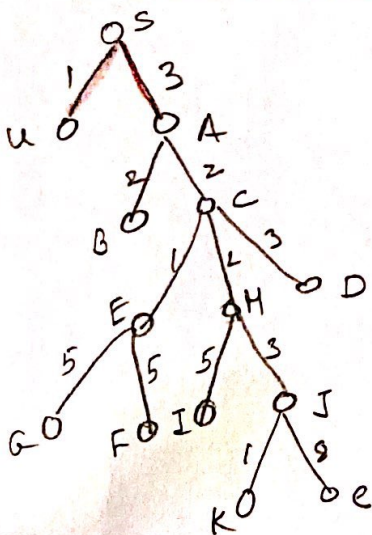


11 18

0 1 3 5 5 6 7 8 11 11 12 10  $\phi$   $\phi$   
S u A B C E H D G F I J k e

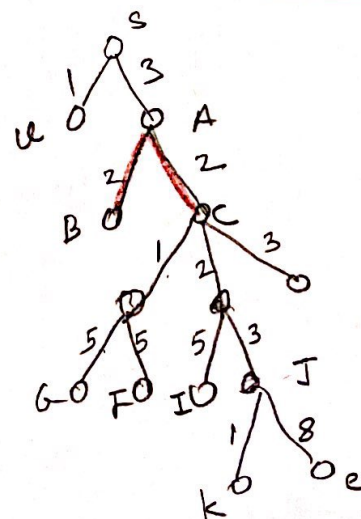
$3+2+2+3+1=11 < \infty$ , K's value changed to 11  
 $3+2+2+3+8=18 < \infty$ , e's value changed to 18

Cycle 2:



0 1 3 5 5 6 7 8 11 11 12 10 11 18  
S u A B C E H D G F I J k e

$0+1=1$ ; u's value is not changed  
 $0+3=3$ , A's value is not changed



0 1 3 5 5 6 7 8 11 11 12 10 11 18  
S u A B C E H D G F I J k e

$3+2=5$ , B's value is not changed  
 $3+2=5$ , C's value is not changed