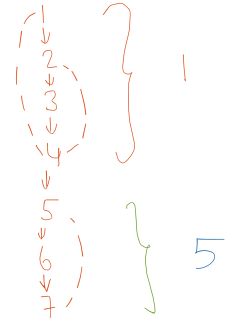
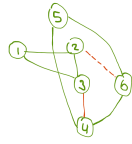
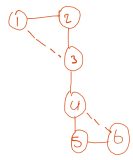


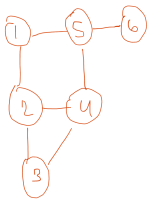
Span =  $N-1$   
 Back =  $M - (N-1)$   
 ↑  
 No. of edges



DFS tree

3 4, 2

2



low repr



Count crosses over bridge

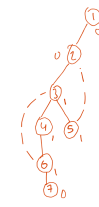
Time of vis Low



$N-1$   
 $6-(3) = 3$



$cnt_u = \# \text{be } \uparrow \text{ from } u$   
 $- \# \text{be } \downarrow \text{ from } u$   
 $+ \sum cnt_v$



++ time



$cnt_u = 0$   
 $\text{edge}(u, \text{par}[u]) = \text{bridge}$

