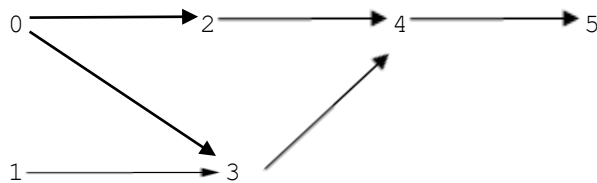


Work on the following problems and you need to be able to make some changes to these problems during lab final. You need to do two out of three problems for lab final.

1. Given the text file like US Declaration of Independence, process it and display the two most frequently used words (words and counts in descending order). You can find the file on Canvas (under lab 2). There is a requirement that the run time must be $O(n)$ where n is the number of words in the file. *Hint: input each word and store it and the count in a hash map.*
2. Given three sorted arrays of names (strings) with lengths k , m , and n , provide the code to perform a three-way merge to merge them into one sorted array in $O(k + m + n)$.
3. Given the following DAG, provide a simple matrix to represent it (each entry of the matrix would hold a value 0 or 1).



Provide code to print the above DAG using the following format (first row is provided and use y when there is an edge)

	0	1	2	3	4	5
0			y	y		
1						
2						
3						
4						
5						

Print one possible topological ordering for the above DAG such as:

0 2 1 3 4 5