Sample Input and Output

Sample Input 1	Output for Sample Input
5 5 3	We're doomed Mr Frodo!
0 3 5 3	
0 1 5 4	
0 2 5 4	

Sample Input 2	Output for Sample Input
5 5 3	We can make it Mr Frodo!
0 1 5 3	
0 3 5 1	
0 2 5 2	

Sample Input 3	Output for Sample Input
4 4 3	We can make it Mr Frodo!
0 1 3 3	
0 3 1 3	
4 3 1 1	

The following diagrams are images for the Sample Inputs: