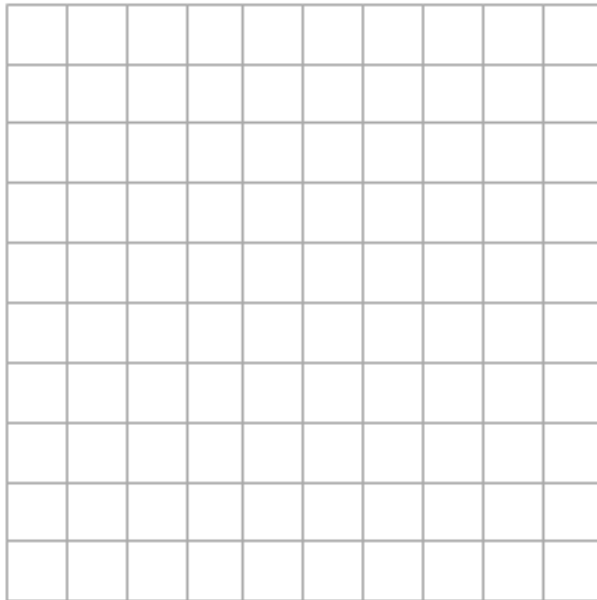


# Run length Encoding and Dictionary Coding – methods of lossless compression in computing

Please complete and bring with you on enrolment day.

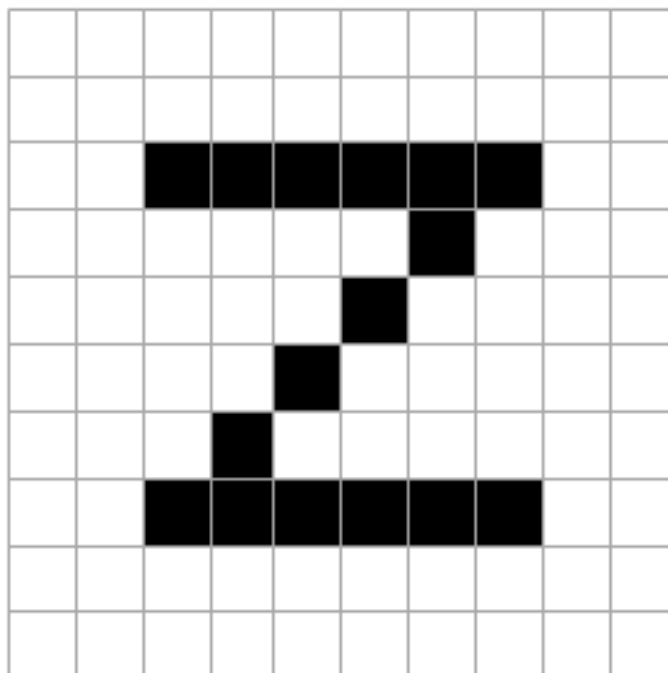
Reconstruct the original image which has been compressed using Run-Length coding.



Assume an alternating sequence of white pixels followed by black:

23 4 6 1 2 1 6 1 2  
1 6 4 6 1 2 1 6 1  
2 1 6 4 13

Encode the following image into a string of numbers using Run-Length coding. Could your finished data stream be compressed any further?



Reconstruct the original message which has been compressed using Dictionary coding

Reference	Data
1	Hickory
2	Dickory
3	Dock
4	The
5	Mouse
6	Ran
7	Up
8	Clock
9	Struck
10	One
11	And
12	Down
13	he
14	run

Compressed message:

1 2 3  
 4 5 6 7 4 8  
 4 8 9 10  
 11 12 13 14  
 1 2 3

Original message:

Using Dictionary coding, encode your own message / limerick into a compressed data stream. Make a note elsewhere of the original message and bring to your first lesson

Reference	Data
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

Compressed message:

Original message:

Name:

Programming languages you have used: