Student	Biao Liu	50

Part 1

	Available	Marks
Create a matrix *message1* that contains the character data above, together with the numerical labels for rows and columns. Display this matrix.	5	2
Generate the ciphertext using the following ruleset: Start at 5,5 and work towards the left. Read odd-numbered columns upwards and even-numbered columns downwards. Display the encrypted message as a vector *ciphertext1* which contains each character of the ciphertext as a separate element in the vector.	20	13
Suppose that the message is written in a 3x9 array rather than a 5x5 array. Generate an appropriate matrix *message2* and use the two methods given in the introduction to generate two more vectors *ciphertext2* and *ciphertext3*.	15	6
Which of the two matrices, *message1* or *message2* do you think produces the most secure encryption methods? In a comment at the end of your script say which you think is the most secure and why this is the case. Do not write more than 100 words on this.	5	3
Commenting and use of white space	5	1
	TOTAL	25

Comments
1.5 Use of white space is fine, but commenting is very weak. Name and student number are missing.
1.1 The matrix should be called message1, not M. Labels are not included.
1.2 We'd normally use NULL rather than c() to define a null vector. That's a nice elegant way of generating the ciphertext, but remember to use the variable names given in the question.
1.3 You were told not to use functions for this assignment. As a result, although the code works, you have received no marks for that section.

Part 2

	Available	Marks
Create an appropriate matrix to hold the decrypted message and populate it from the ciphertext. Display the matrix once it has been populated. METHOD 1	13	10
Create an appropriate matrix to hold the decrypted message and populate it from the ciphertext. Display the matrix once it has been populated. METHOD 2	13	10
Create an appropriate matrix to hold the decrypted message and populate it from the ciphertext. Display the matrix once it has been populated. METHOD 3	13	0
Which of the two matrices, 5x5 or 9x6, do you think produces the most secure encryption methods? In a comment at the end of your script say which you think is the most secure and why this is the case. Do not write more than 100 words on this.	6	4
Commenting and use of white space	5	1
	TOTAL	25

Comments
2.5 Use of white space is fine, but commenting is very weak. Name and student number are missing.
2.1 Okay
2.2 Almost there.
2.3 You were told not to use functions for this assignment. As a result, although the code works, you have received no marks for that section.