

Student	Gangesh Muddula	67
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Part 1

	Available	Marks
Create a matrix <code>vigenere</code> that contains the character data. Display this matrix.	5	5
Using the keyphrase <code>UWTSDSWANSEA</code> , encrypt the message <code>CAPTURETHEFLAG</code> using the method described. You should create a vector <code>keyphrase</code> to hold the keyphrase, a vector <code>plaintext</code> to hold the plaintext and a vector <code>ciphertext</code> to hold the ciphertext. Display the plaintext and the ciphertext.	25	16
Decrypt the following ciphertext using the keyphrase <code>RPROGRAMMING</code> and store the result in the vector <code>plaintext</code> . <code>ETMSXWISTBNHRIKZKKHMFGBAUDECZEEQPBBBCZC</code>	25	16
Commenting and use of white space	5	5
	TOTAL	42
Comments Good commenting and use of white space. Q1: Good use of LETTERS and elegant loop structure. Q2: Better to enter the keyphrase and plaintext as a single string (1-element chr vector) and then process it accordingly, but the encryption process is good. Q3: Better to enter the keyphrase and plaintext as a single string (1-element chr vector) and then process it accordingly, but the decryption process is good.		

Part 2

	Available	Marks
Explain how your code works (including a flow chart) and explain how you tested your code (include examples of the code and data used). TASK 1	10	5
Explain how your code works (including a flow chart) and explain how you tested your code (include examples of the code and data used). TASK 2	10	6
Explain how your code works (including a flow chart) and explain how you tested your code (include examples of the code and data used). TASK 3	10	5
A reflection on what you found challenging, what you learned, and what you would do differently next time.	10	9
	TOTAL	25
Comments Good introduction. T1: More detail would be useful but this covers the main theme. The flow chart needs to show the loops used. T2: Good, although again the flowchart needs further development. T3: More detail would be useful but this covers the main theme. The flow chart needs to show the loops used. Good reflection. Understanding the problem before you try writing the code is essential! 😊		