

Student	Shubhi Pushkarna	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	17
Decrypt the following ciphertext using the keyphrase <code>RPROGRAMMING</code> and store the result in the vector <code>plaintext</code> . <code>ETMSXWISTBNHRIKZKKHMFGBAUDECZEEQPBBBCZC</code>	25	18
Commenting and use of white space	5	4
	TOTAL	44
Comments Remember to include your name and student ID in the comments at the top of the file. Otherwise commenting and use of white space is generally good. Q1: Good, although you could have used the built-in <code>LETTER</code> to define the alphabet. Q2: Remember that R starts at 1, not at 0. This can cause problems if you miss it. The solution is fine. Q3: The solution is fine. Good use of <code>cat()</code> .		

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	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 2	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 3	10	5
A reflection on what you found challenging, what you learned, and what you would do differently next time.	10	7
	TOTAL	23
Comments Q1: The explanation is fine, but the flow chart should show a loop for setting up the matrix rather than for testing it. Q2: Why map A to 0? R starts counting array indices at 1, not at 0. The flow chart should show the loops in the main body of the script, not just for testing. Q3: Why map A to 0? R starts counting array indices at 1, not at 0. The flow chart should show the loops in the main body of the script, not just for testing. Good work in telling me what you asked ChatGPT.		