

Student	Sai Akula	84
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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	22
Decrypt the following ciphertext using the keyphrase <code>RPROGRAMMING</code> and store the result in the vector <code>plaintext</code> . <code>ETMSXWISTBNHRIKZKKHMFGBAUDECZEEQPBBCZC</code>	25	22
Commenting and use of white space	5	5
	TOTAL	54
Comments Good clear commenting and use of white space. Q1: Elegant method of building the matrix – good use of the shifted index. Q2: Good error trapping converting everything to upper case. Nice use of <code>match()</code> . Good use of <code>cat()</code> for the outputs. Q3: Good solution.		

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	8
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	8
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	8
A reflection on what you found challenging, what you learned, and what you would do differently next time.	10	6
	TOTAL	30
Comments Good short background and introduction. Q1: Nice clear explanation with clear flowchart. Q2: Nice clear explanation with clear flowchart. Q3: Nice clear explanation with clear flowchart. Q4: A bit too much discussion of the historical context. What specific problems did you have? Would you do it differently in future? Where did you find support, e.g. the match() function?		