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| Student | Inosha Srivarathan | 54 |
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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        | 13    |
| Decrypt the following ciphertext using the keyphrase <code>RPROGRAMMING</code> and store the result in the vector <code>plaintext</code> .<br><code>ETMSXWISTBNHRIKZKKHMFGBAUDECZEEQPBBCZC</code>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 25        | 13    |
| Commenting and use of white space                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 5         | 2     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | TOTAL     | 33    |
| <p>Comments</p> <p>Although the individual lines of code are commented well there are no comments identifying which code answers which question. Remember also to include your name and student number in a comment at the top of the script.</p> <p>Q1: Good use of LETTERS.</p> <p>Q2: The code works but you have demonstrated it with the wrong test case. You should have used <code>CAPTURETHEFLAG</code> as instructed in the question.</p> <p>Q3: The code works but you have demonstrated it with the wrong test case. You should have used <code>ETMSXWISTBNHRIKZKKHMFGBAUDECZEEQPBBCZC</code> and <code>RPROGRAMMING</code> as instructed in the question.</p> |           |       |

## 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           | 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           | 6     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>TOTAL</b> | 21    |
| Comments<br>Q1: The text is understandable but you have not included a flow chart.<br>Q2: Text is understandable but uses the wrong test case. The flow chart is confusing but covers most of the process.<br>Q3: The text is understandable and uses the right test case. The flow chart is fine.<br>Within a reflection section like this you don't need to consider Kolb's or Martin's theories.<br>The important thing is to say what you found interesting or challenging. |              |       |