## **VIGvisual Evaluation**

For each statement, please circle one of the choices.

1. The demo mode of VIGvisual helped me to better understand how to encrypt and decrypt messages with the Vigenère Cipher.

1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

2. The practice mode of VIGvisual helped me to better understand how to encrypt and decrypt messages with the Vigenère Cipher.

1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

3. The following tool was most useful in helping me to understand how to encrypt and decrypt messages with the Vigenère Cipher. Select all that apply.

Table Disk Slider

4. VIGvisual helped me to better understand how to use the Kasiski method to find the keyword length.

1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

5. VIGvisual helped me to better understand how to use the Index of Coincidence method to find the keyword length.

1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

- 6. VIGvisual helped me to better understand how to use the  $\chi^2$  method to recover the keyword. 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree
- 7. I understood how to attack the Vigenère Cipher more after I was able to use VIGvisual.
   1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree
- 8. By using VIGvisual, I was able to identify the parts of the Vigenère Cryptosystem that I did not understand in Stage 1.

1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

9. VIGvisual enhanced my self-study in general.
1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

- 10. How long did it take you to understand the Vigenère Cipher by using the software?
  1=Less Than Five Minutes
  2=Five to Ten Minutes
  3=Ten to Fifteen Minutes
  4=Fifteen to Thirty Minutes
  5=More than Thirty Minutes
- 11. How often did you use this software when studying the Vigenère Cipher?
  1=Only Once 2=One to Three Times 3=Three to Five Times
  4=Five to Ten Times 5=More than Ten Times
- 12. How long did you use this software totally?
  1=Less Than Five Minutes 2=Five to Fifteen Minutes 3=Fifteen to Thirty Minutes 4=Thirty Minutes to One Hour 5=More than One Hour

Please answer each question.

1. Please evaluate and comment on the Kasiski tab for finding the keyword length. Was this component of the program easy to understand and use? Did it enhance your learning?

2. Please evaluate and comment on the IOC tab for finding they keyword length. Was this component easy to understand and use? Did it enhance your learning?

3. Please evaluate and comment on the Keyword Recovery Tab. Was this component easy to understand and use? Did it enhance your learning?

4. Please evaluate and comment on the layout of the program.

5. Did VIGvisual help you understand the Vigenère cipher, including the way of breaking it, better than the use of the resources you used in Stage 1? Please name the most and least effective parts, and provide your comments. Please also comments on the effectiveness of using VIGvisual and the resources you used in Stag e1.

6. Are there any new features you wish to be added to make this program better and more effective?

7. Did you install the software on your computer? If so, which operating system did you use? Did you encounter any problems when installing the software on your computer? Please explain.