## Smartknower

## **Minor Project**

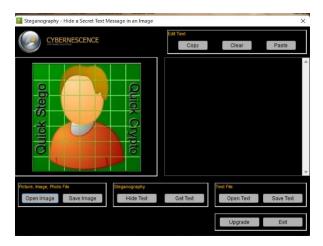
Project Name: Cyber Security March Minor Project

**Problem Statement:** Try to Encrypt the Data in image file using quick stegno tool (Download from Internet) and command prompt also and show them how to decrypt also. Write a report advantage of cryptography and steganography)

For steganography one needs to have two things a text file to be encrypted and an image to hide the encrypted file or normal text file.

Step 1: Download the quick stegno tool for Mozilla Firefox.

Step2: Extract the application and run.



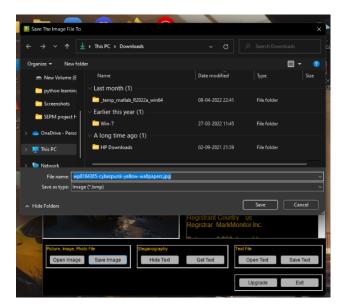
Step3: Find an image to be used and open the image in the application.



Step4: Open the text file or type the content in the space provided that is supposed to be hidden.

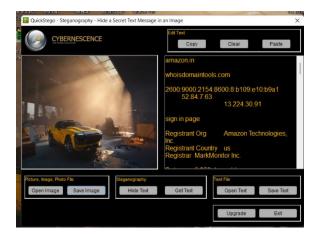


Step5: Save the image with the preferred extension.

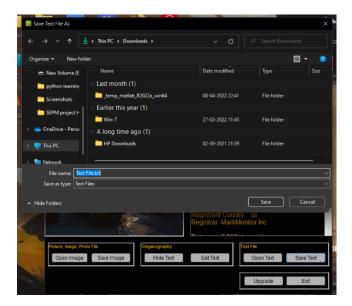


Step6: Share the image file to the other person.

Step7: To see the hidden text in the image, open the image in the quick stegno tool.



Step8: Get the text hidden as a text file.



Advantages of Cryptography and Steganography:

- **Confidentiality** Encryption technique can guard the information and communication from unauthorized revelation and access of information.
- **Authentication** The cryptographic techniques such as MAC and digital signatures can protect information against spoofing and forgeries.
- **Data Integrity** The cryptographic hash functions are playing vital role in assuring the users about the data integrity.
- **Non-repudiation** The digital signature provides the non-repudiation service to guard against the dispute that may arise due to denial of passing message by the sender.
- Hard to detect. Original image is very similar to altered image. Embedded data resembles Gaussian noise
- Hard to detect as message and fundamental image data share same range.
- Altered picture closely resembles original. Not susceptible to attacks such as rotation and translation.

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