



Message Encryption and Decryption Tool

Presented by:

Kunal Chaudhari {10}

Dhrub Das {12}

Shivam Dhale {14}

Rishi Gharde {20}





Table of Content

- 1. Introduction**
- 2. Text Encryption**
- 3. Text Decryption**
- 4. Problem Statement**
- 5. Objective**

- 6. Project Scope**
- 7. Hardware & Software Requirement**
- 8. Conclusion**



Introduction

- ENCRYPTION AND DECRYPTION ARE ESSENTIAL TECHNIQUES FOR PROTECTING SENSITIVE DATA FROM UNAUTHORIZED ACCESS.
- IN THIS TOOL, WE WILL BE USING PYTHON LIBRARIES TO IMPLEMENT ENCRYPTION.
- USER CAN ENCRYPT A MESSAGE WITH A KEY, WHICH CAN ONLY BE DECRYPTED BY SOMEONE WITH CORRECT KEY

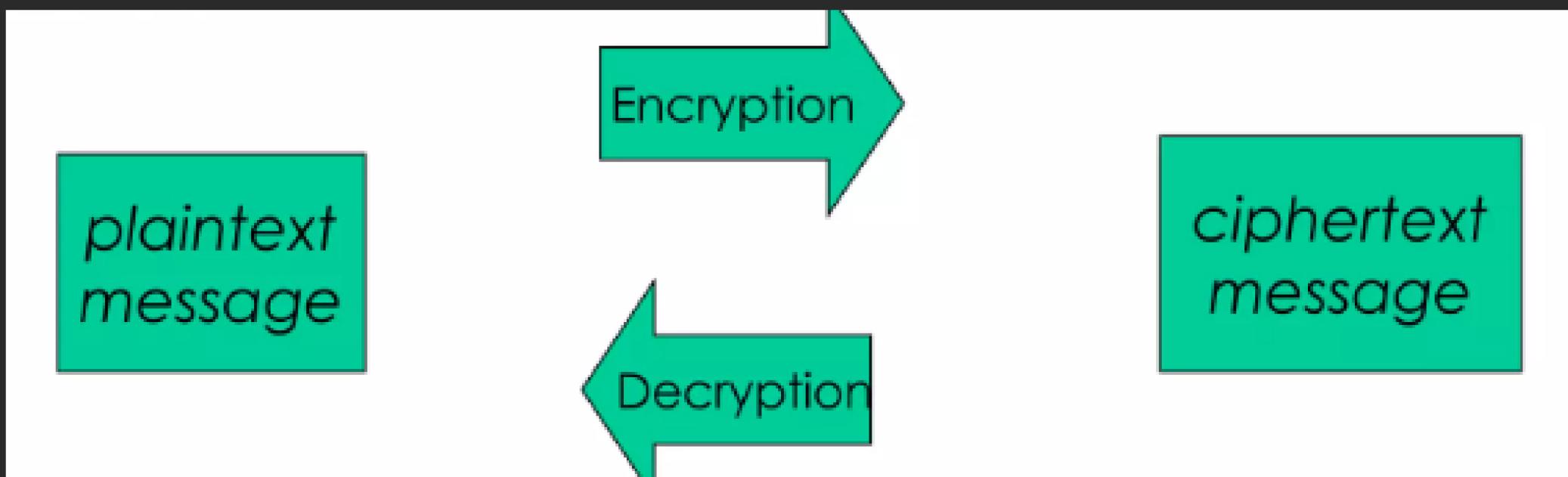


Encryption

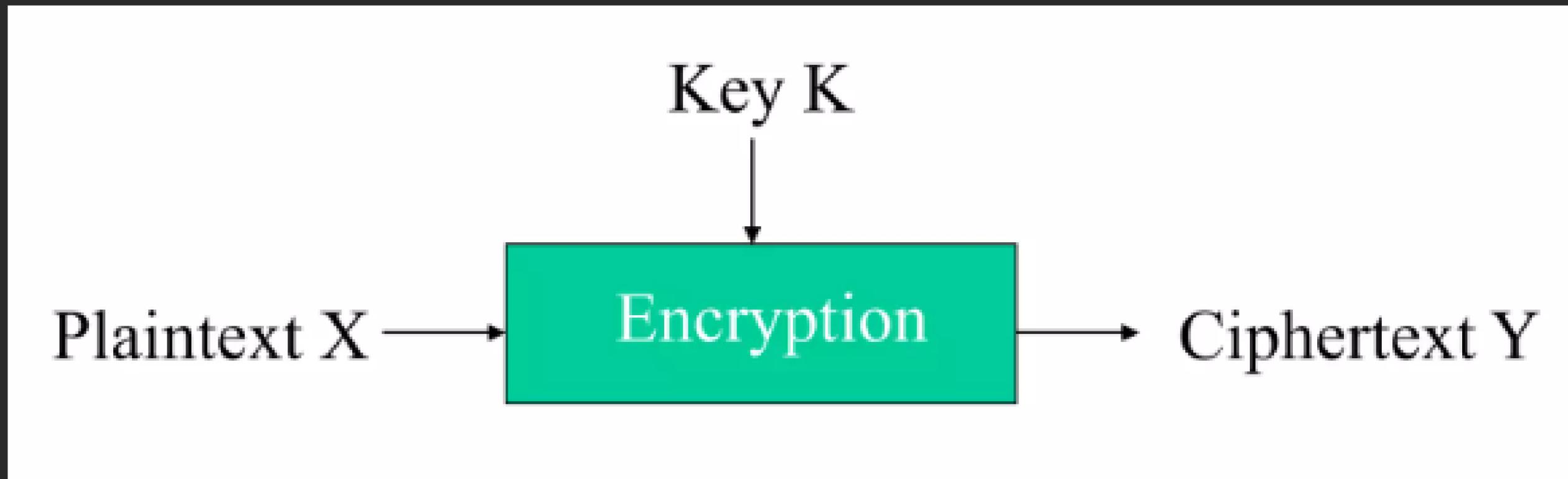
- The Process of converting plain text into ciphertext.

Decryption

- The Process of converting ciphertext into plain text.

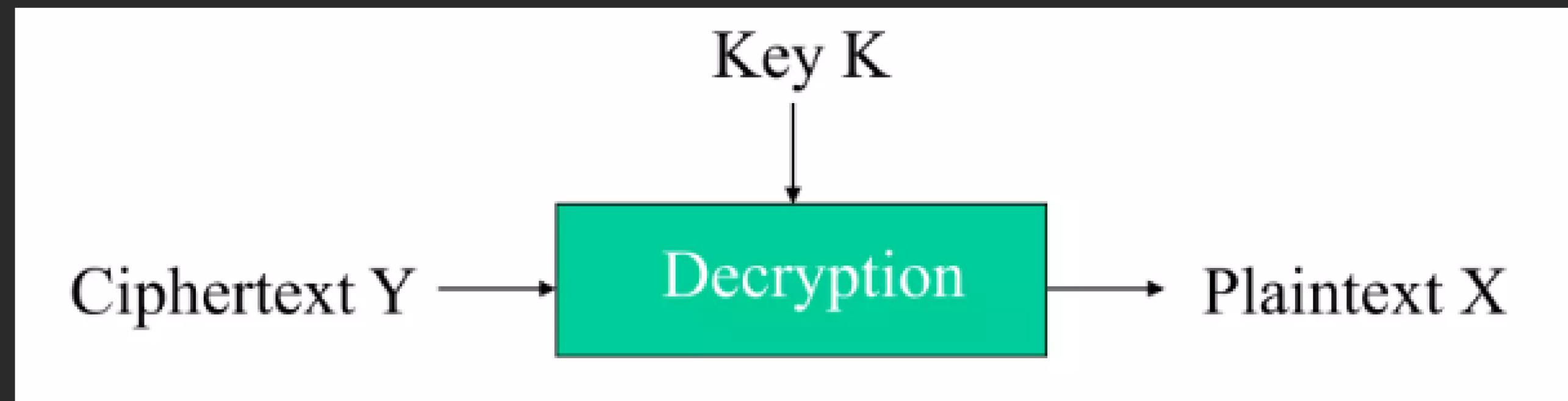


Text Encryption



- The original unaltered contents of the message or text is called plaintext

Text Decryption



- The altered text after encryption is called as enciphered text or ciphertext.

Problem Statement

- Help protect sensitive information from unauthorized access.
- Providing simple tools for implementing encryption

Objectives



4

PROVIDE SECURITY



5

MESSAGE ENCRYPTION



6

TO PROVIDE A SECURE AND USER-FRIENDLY MESSAGE ENCRYPTION AND DECRYPTION TOOL THAT CAN BE USED TO PROTECT SENSITIVE INFORMATION



7

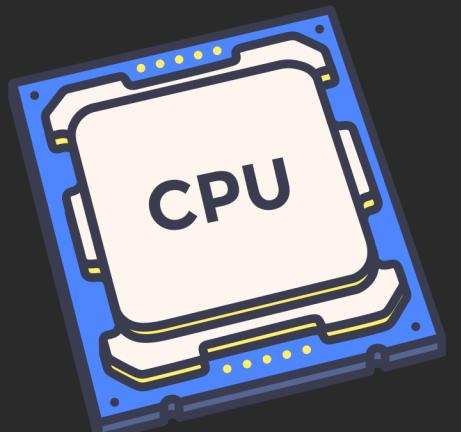
ENSURE ACCURACY AND EFFICIENCY OF THE TOOL BY PERFORMING VERIFICATION AND MAKING IT OPEN SOURCE FOR EVERYONE.



Project Scope



-  The device will be **designed to perform symmetric encryption and decryption operations using the keys generated.**
-  This project will **provide a general guide** for building tools in Python, including step-by-step instructions for installation and use.
-  The tool is designed to **provide a simple and user-friendly interface** that allows users to easily enter and decrypt messages.
-  The work will also **not include advanced security operations** such as key exchanges or network security



▪ HARDWARE REQUIREMENTS:

- I. INTEL PENTIUM PROCESSOR(MIN.)
- II. 100 MB HDD.
- III. 64MB RAM.



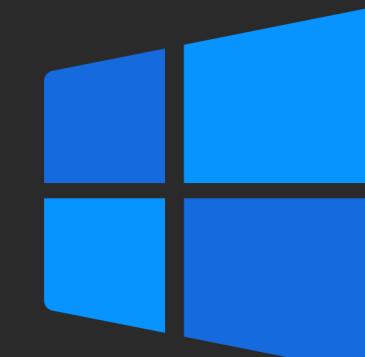
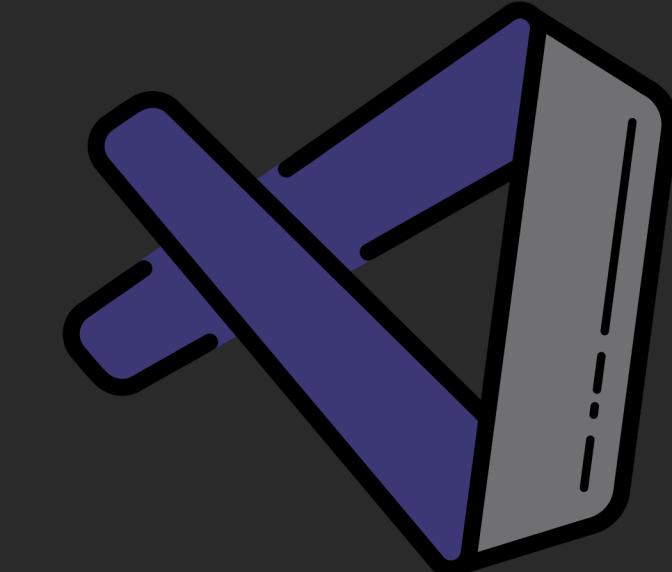
▪ SOFTWARE REQUIREMENTS:

- I. PYTHON
- II. VS CODE (CODE RUNNING)
- III. OPERATING SYSTEM: WINDOWS NT.



▪ LIBRARIES REQUIREMENTS:

- I. TKINTER
- II. BASE64
- III. OS



Conclusion



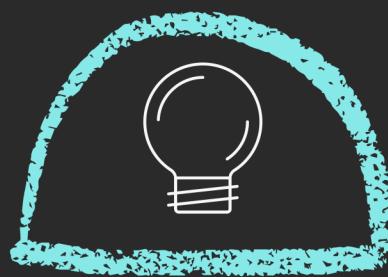
Provide Data Security

- To provide a user-friendly solution to the growing need for secure communication channels in today's digital world.



Accuracy

- To ensure accuracy, efficiency, and user-friendliness by performing verification and validation experiments



Future Implementation

- Improving the GUI which can improve its usability for a wider range of users.
- Getting feedback from user

Thank You

Thank you