# RUINED LANGUAGE

### INTRODUCTION

RUINED LANGUAGE IS OUR CRYPTOGRAPHY CHALLENGE. IT FEATURES A VERY COMMON CIPHER THAT CAN PROVIDE A STRONG FOUNDATION FOR CRYPTOGRAPHIC UNDERSTANDING.

CRYPTOGRAPHY BUILDS ON THESE CIPHERS TO MAKE COMPLEX ENCRYPTION SCHEMES THAT PROVIDE PRIVACY TO MILLIONS OF USERS ON THE INTERNET. IT LIES IN EVERY ASPECT OF OUR TECHNOLOGICAL LIVES. FROM PASSWORD ENCRYPTION TO HTTP ENCRYPTION WHEN YOU VISIT A WERSITE.

A STRONG FOUNDATIONAL UNDERSTANDING IN CRYPTOGRAPHY CAN MAKE YOU RECOME A STRONGER CYRER SECURITY OFFICER.

## TIPS

## VOCABULARY

CIPHERTEXT - TEXT THAT HAS BEEN ENCRYPTED

PLAINTEXT - NORMAL, READABLE TEXT

ENCRYPTION - THE PROCESS OF CONVERTING CIPHERTEXT

TO PLAINTEXT

DECRYPTION - PROCESS OF CONVERTING PLAINTEXT TO

CRYPTOGRAPHY FEATURES VARIOUS DIFFERENT TYPES OF CIPHERS.

CAESAR CIPHER - A SCHEME THAT ROTATES ALL LETTERS IN A TEXT BY A
SPECIFIC NUMBER OF CHARACTERS (OFTEN REFERRED TO AS THE KEY)

VIGENERE CIPHER - A SCHEME THAT ROTATES ALL LETTERS IN A TEXT USING ANOTHER THING AS THE KEY. THIS USES THE DIFFERENCE BETWEEN LETTERS TO ROTATE EACH CHARACTER INDIVIDUALLY

SUBSTITUTION CIPHER - SIMPLEST SCHEME WHERE EACH LETTER MAPS TO A SYMBOL OR RANDOM CHARACTER.

HILL CIPHER - A SCHEME ENCRYPTS MESSAGES BY TRANSFORMING BLOCKS OF LETTERS INTO VECTORS AND MULTIPLIES THEM BY AN INVERTIBLE MATRIX

## HINTS

- TRY MATCHING UP THE LETTERS TO THE TEXT YOU KNOW NOW
- 2. THINK OF THE MOST COMMON LETTERS IN ENGLISH AND
  TEST OUT COMBINATIONS THAT COULD MAKE SENSE