

1. One Time Pad

- 1.1. One Time Pad este un sistem de criptare perfect sigur daca este folosit corect.
- 1.2. 0xa39096ed4eaa5f0b987357620eb0a64d0e18cdd668748c762a2f1ef475d6517d8bea40fedd938fb6e98ac65435db648b4aa4f3bb880dc535e5d1a154279e76478dd703bd92e1519560d103f759c692
- 1.3. Daca re folosim cheia, vom putea in continuare decripta respectiva criptare, dar nu vom avea mesajul original deoarece nu am folosit cheia cu care acesta a fost criptat initial.

2. Sisteme de criptare istorice

- 2.1. Cifrul Atbash este un tip de cifru monoalfabetic de subsitutie care mapeaza alfabetul pe inversul sau.

Text criptat: hvxfirgzgv

Text decriptat: securitate

Securitatea este mica deoarece exista 1/26 posibilitati de a "ghici" cheia.

Se poate analiza frecventa aparitiei cifrelor

- 2.2. Folosind un cifru de tip ruta, textul este scris pe un grid cu dimensiuni specificare si apoi citit folosind un model dat de cheie.

Pentru a ilustra, voi folosi textul: SECURITATE INFORMATICA

S U T E F M I

E R A I O A C

C I T N R T A

Cheia poate specifica "spirala, in sensul acelor de ceas, incepand din coltul din dreapta sus". Avem cifrul:

ICATRNT ICESUTE FMAOIAR

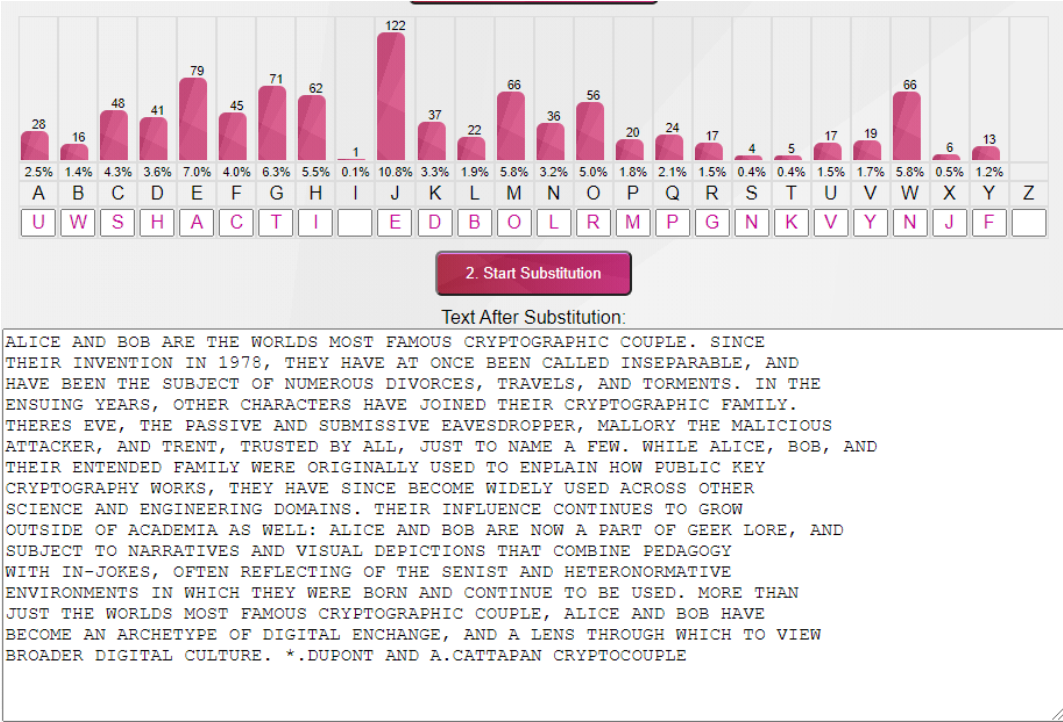
Acest tip de cifruri au foarte multe chei. Nu toate cheile sunt la fel de bune.

Rute alese prost vor lasa prea mult text vizibil sau text care este pur si simplu inversat si astfel vor oferi sansa de a fi decriptate.

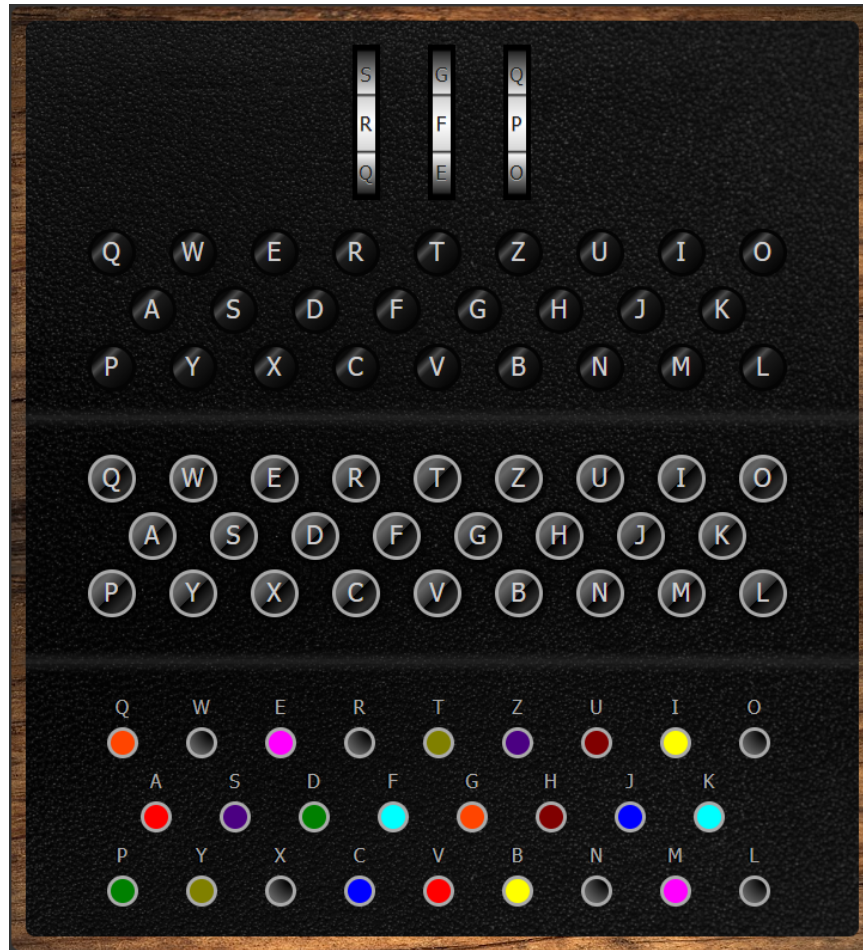
3. Analiza de frecventa

3.1. ALICE AND BOB ARE THE WORLDS MOST FAMOUS CRYPTOGRAPHIC COUPLE. SINCE THEIR INVENTION IN 1978, THEY HAVE AT ONCE BEEN CALLED INSEPARABLE, AND HAVE BEEN THE SUBJECT OF NUMEROUS DIVORCES, TRAVELS, AND TORMENTS. IN THE ENSUING YEARS, OTHER CHARACTERS HAVE JOINED THEIR CRYPTOGRAPHIC FAMILY. THERES EVE, THE PASSIVE AND SUBMISSIVE EAVESDROPPER, MALLORY THE MALICIOUS ATTACKER, AND TRENT, TRUSTED BY ALL, JUST TO NAME A FEW. WHILE ALICE, BOB, AND THEIR ENTENDED FAMILY WERE ORIGINALLY USED TO ENPLAIN HOW PUBLIC KEY

CRYPTOGRAPHY WORKS, THEY HAVE SINCE BECOME WIDELY USED ACROSS OTHER SCIENCE AND ENGINEERING DOMAINS. THEIR INFLUENCE CONTINUES TO GROW OUTSIDE OF ACADEMIA AS WELL: ALICE AND BOB ARE NOW A PART OF GEEK LORE, AND SUBJECT TO NARRATIVES AND VISUAL DEPICTIONS THAT COMBINE PEDAGOGY WITH IN-JOKES, OFTEN REFLECTING OF THE SENIST AND HETERONORMATIVE ENVIRONMENTS IN WHICH THEY WERE BORN AND CONTINUE TO BE USED. MORE THAN JUST THE WORLDS MOST FAMOUS CRYPTOGRAPHIC COUPLE, ALICE AND BOB HAVE BECOME AN ARCHETYPE OF DIGITAL ENCHANGE, AND A LENS THROUGH WHICH TO VIEW BROADER DIGITAL CULTURE. *.DUPONT AND A.CATTAPAN CRYPTOCOUPLE



3.2.



STEFA NIACA RUTAS U = RDGBL GAUJM WCMUY M