U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND
DATA & ANALYSIS CENTER (DAC)

DECODING / ENCODING
Professional Development Event (PDE)

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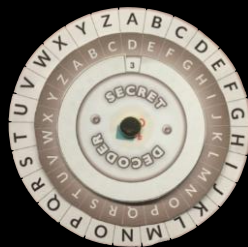DEVCOM DAC

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ENCRYPTION FUNDAMENTALS

What is a **Secret Message**?

- A message that is **unreadable** and **does not make sense** when you see it.
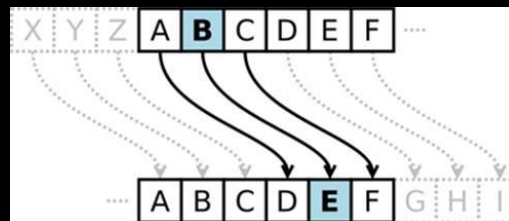
Some *SIMPLE* types of <u>encoding</u>:

kahrs

Scrambler Cipher

Shifting Machine

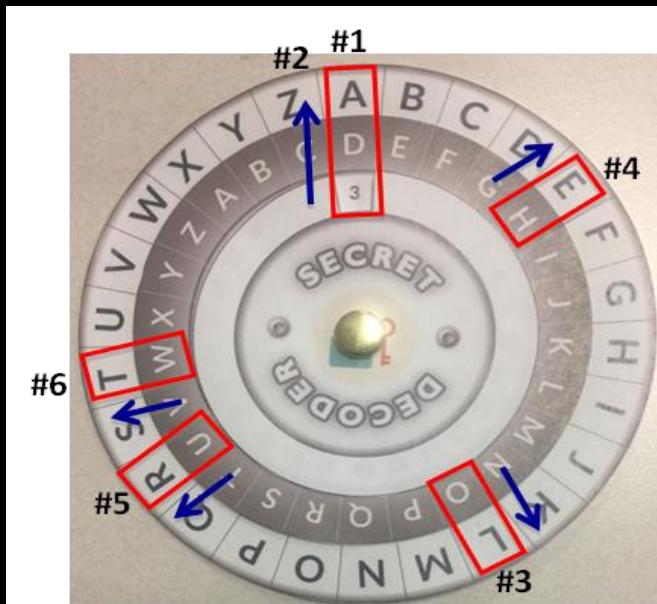The alphabet is moved by a number of spaces
Example: number of spaces = **3**

X Y Z | A B C D E F

A B C D E F G H I

Shifting Cipher

{3, 16, 8}

Page   Word

Line

Book Cipher

SHIFTING CIPHER

a) **Align** letter "*A*" on the **WHITE circle** with the **SHIFT number**.
b) Do **NOT rotate** the disks **after** such **alignment**.
c) To **DECODE**, look for the **letter of the SECRET message** on the **BROWN** circle and the **REAL message letter** will be the one on the **WHITE** circle.
NOTE: The **SHIFT NUMBER** may be **DIFFERENT** for each **SECRET** message.

EXAMPLE:
Shift: **3**
Secret Message → **D O H U W**
↓ ↓ ↓ ↓ ↓
Real Message → **A L E R T**

DECODER / ENCODER

To run the Python Script, open a Terminal window and type:
python3 decoder.py

Decode Example:

DECODER / ENCODER	_ ▢ ✕

Message: `fbehu dwwdfn` **1**

Shift: `3` **2**

Dec/Enc?: ◉ Decode **3**
◯ Encode

Get Message! **4**

QUIT

CYBER ATTACK **5**

1 – Type the message you want to encode/decode
2 – Type the Shift number
3 – Select if you want to decode or encode
4 – Click on "Get Message!"
5 – Read the decoded/encoded message

Encode Example:

DECODER / ENCODER	_ ▢ ✕

Message: `Salvador Melendez`

Shift: `18`

Dec/Enc?: ◯ Decode
◉ Encode

Get Message!

QUIT

KSDNSVGJ EWDWFVWR

CONTACT INFORMATION

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