

**terces sedoc trap owt**

# Secret Codes in Computing

We know that:

- secret codes are used in computing
- there are all sorts of thing we don't want other people to know
- **data** stored on computers is encrypted so that people can't read it
- **substitution ciphers** are easy to break

# Secret Codes in Computing

χρψπτογρραπηψ

# Secret Codes in Computing

χρυστογραφη

cryptology

# Secret Codes in Computing

cryptography

crypto    graph

# Secret Codes in Computing

**Cryptography** is the encoding and decoding of messages using secret codes.

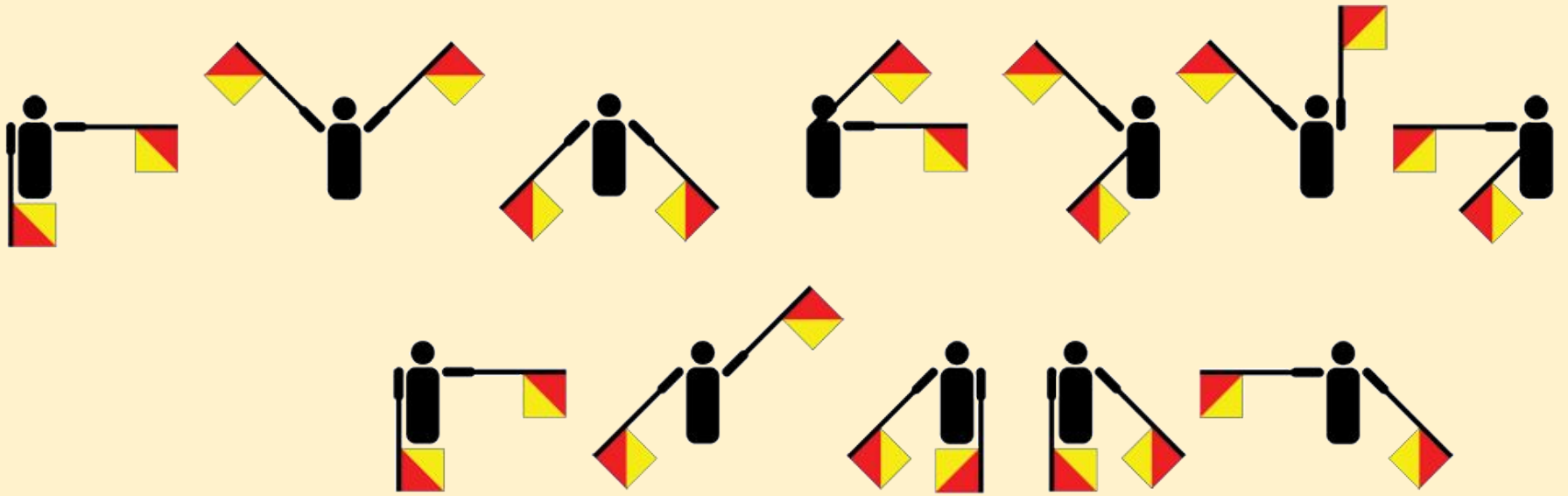
The word comes from the Greek words **kryptos**, meaning "hidden," and **graphein**, meaning "to write."

So **cryptography** means "hidden writing" or "secret writing".

# Secret Codes in Computing



A really simply way to encrypt something it to type it and then change the font into one that uses symbols

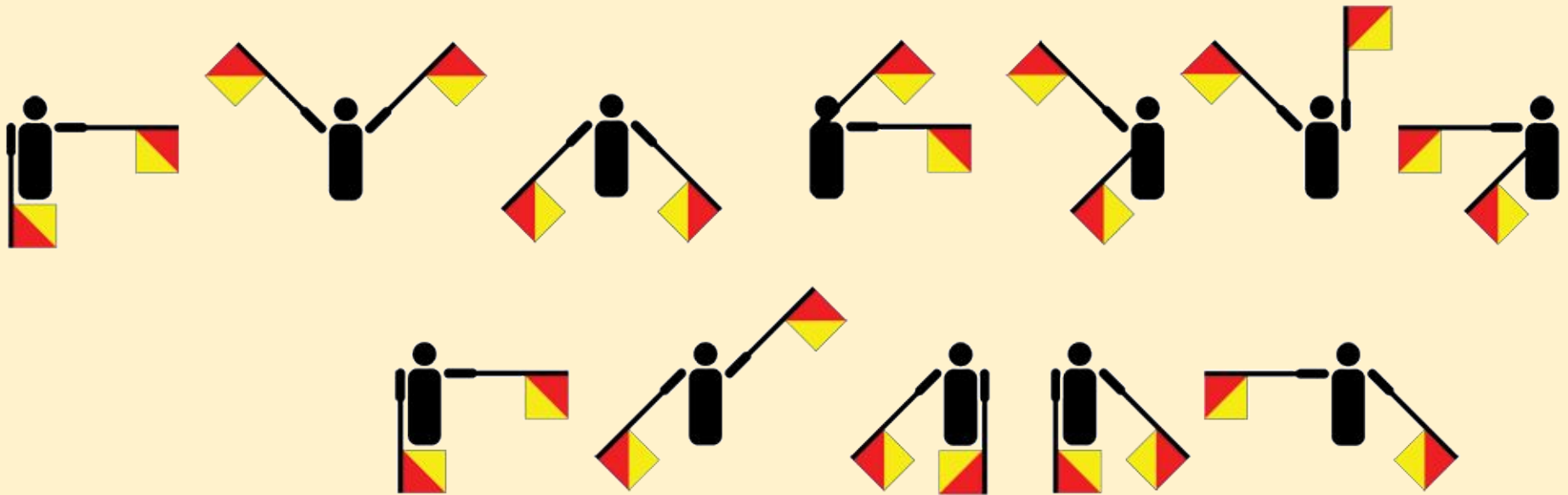




# Secret Codes in Computing

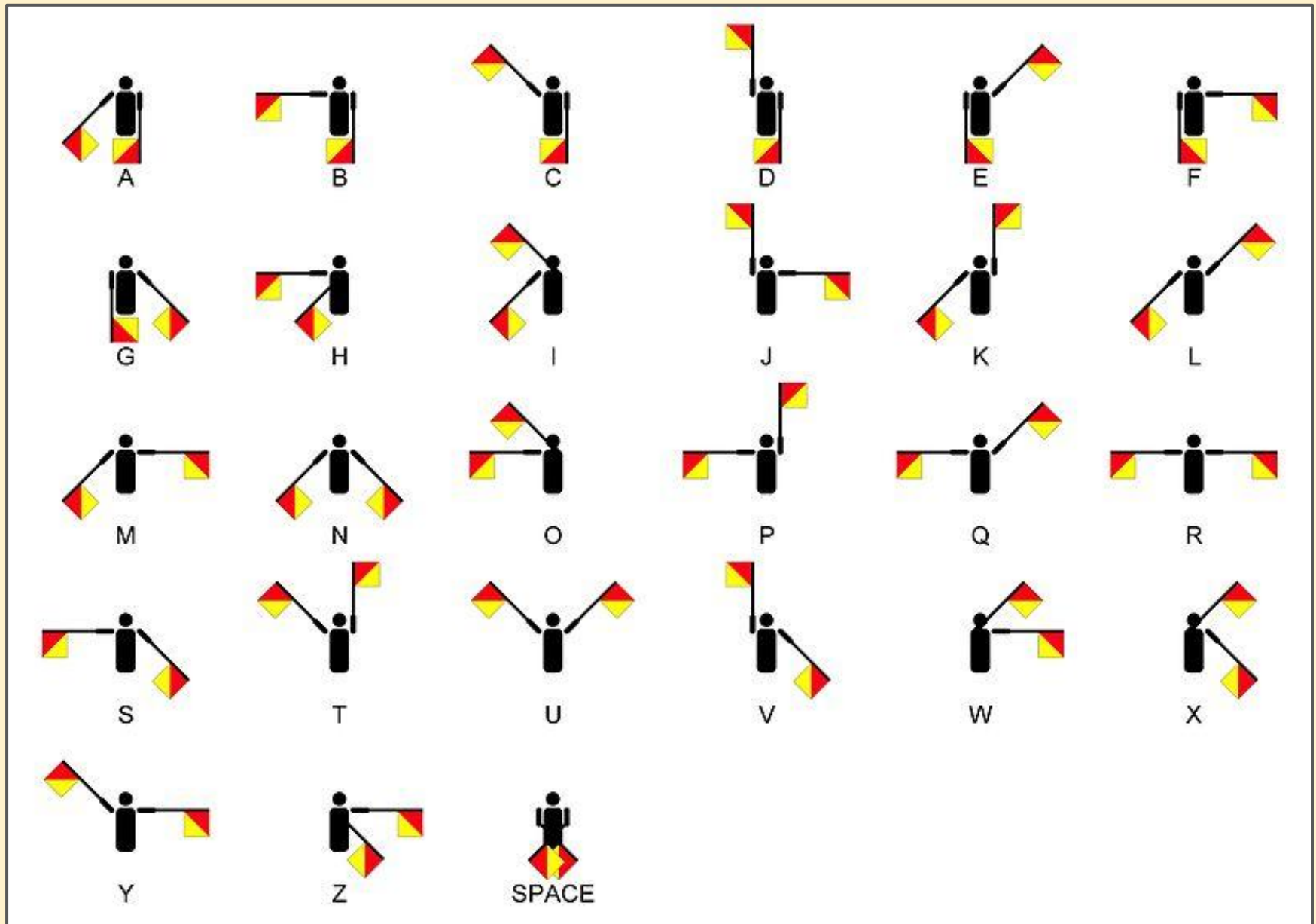
What is this code?

How does it work?





# Semaphore



# Secret Codes in Computing

**Semaphore** is a system of signalling using flags.

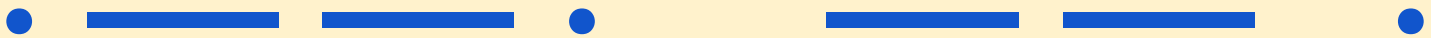
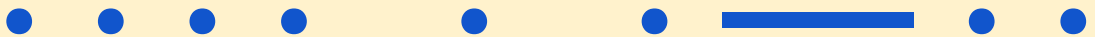
It was first used in 1866.

It has been often used by naval ships - and is still in use today.

Each flag combination has a meaning.

Semaphore is a simple **substitution cipher** - each flag combination has one meaning.





# Secret Codes in Computing

**Morse code** is another type of code that was used by the Navy.

It uses short and long dashes.

It can be done using lights, which means it can work at night. It can also be done using radio - the dashes make sounds.

The Titanic used morse code when it was sinking to ask for help.

