-plain text: is the original message.
or original Form of message (befor coding).

2- cipher text:- is the Encrypted message.
(after Encryption).

3- Encryption:- the process of encoding message. or.
the process to convert plain text into cipher text.

4- Decryption:- the process of decoding message. or.
-the Process to convert cipher text into plain text. (original message).

5- Key:- is apiece of information,
~~to transform plaintext~~
used by an algorithm to transform plain text to cipher text and vice versa

المحاضرة الاولى

"cryptography"

* Cryptography:- is the science and art of transforming messages to Make them secure and prevent the attack.

* Basic terms:-

1- plain text.
2- cipher text.
3- Encryption.
4- decryption.
5- Key.
6- Algorithms.

- Algorithm :- is the sequences of processes, or rules, used to encrypt and decrypt messages in cryptographic system.

related terms . مصطلحات ذات علاقة

* cryptanalysis :- is the Science of decrypting messages. or breaking code.
* cryptanalyst :- aperson expert In analyzing and breaking Codes.

plain text (original message).

↓ Encryption

cipher text

↓ decryption

plain text (original message).

classical Encryption techniques.

Encryption techniques are divided into Two types:-

تبديل

1- Substitution :- one letter is exchanged For another.

تغيير، تنقل من الى

2- transposition:- the order of the letter is rearranged.

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ex: For substitution technique.

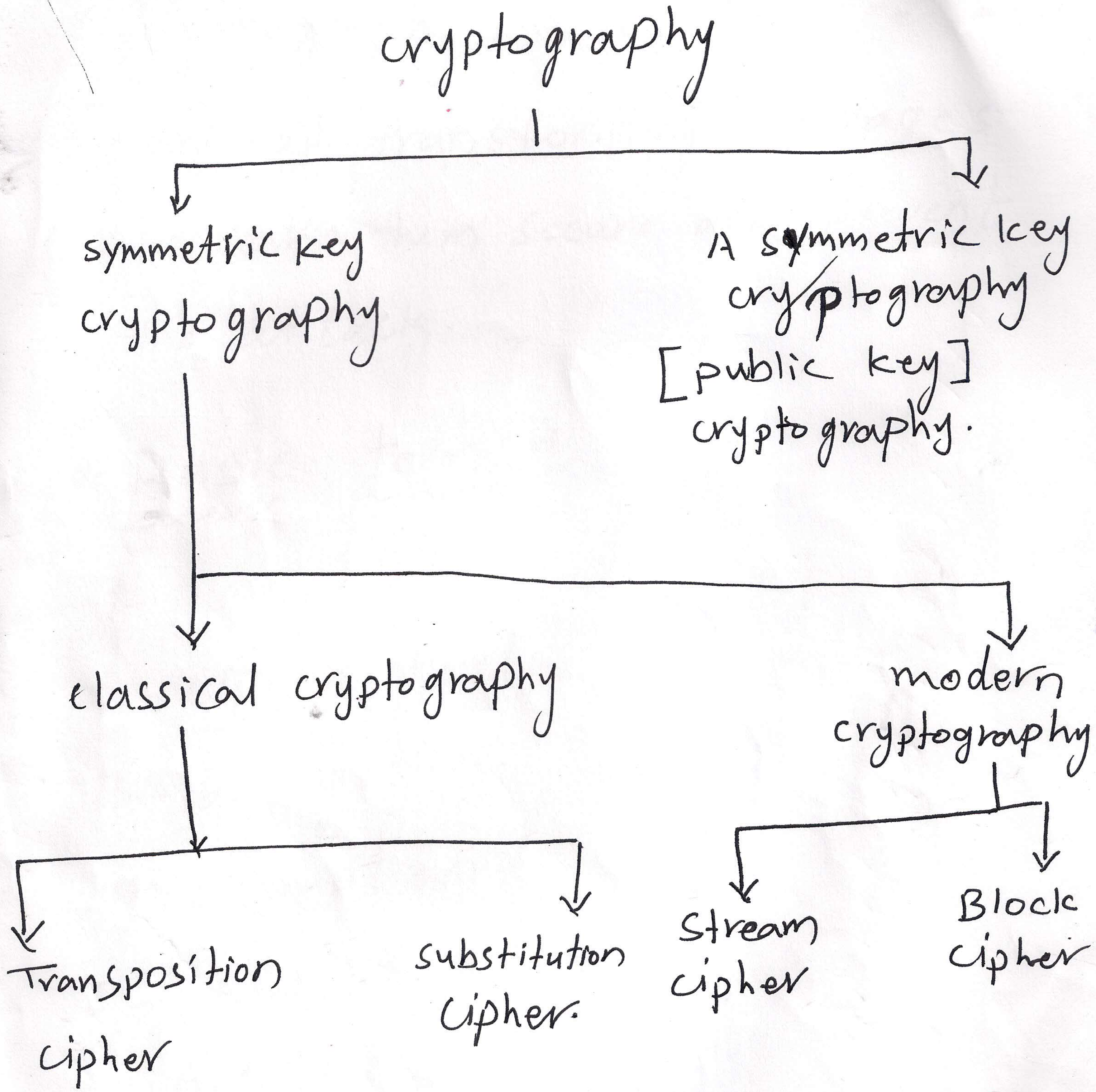
"Caesar cipher."

* cryptography Methods:

1- symmetric key cryptography:-
in this method both the Sender and receiver have the same key.

2- A Symmetric key cryptography:-
here the Sender and receiver have the different keys.

classification



* in symmetric key cryptography one key is used for encryption and decryption. (secret Key).

* in ASymmetric key cryptography there are two keys one is used for encryption (public key). and one is used for decryption (secret key).

*
<u>note</u>

* product cipher technique is a Combination of symmetric and A symmetric key cryptography.