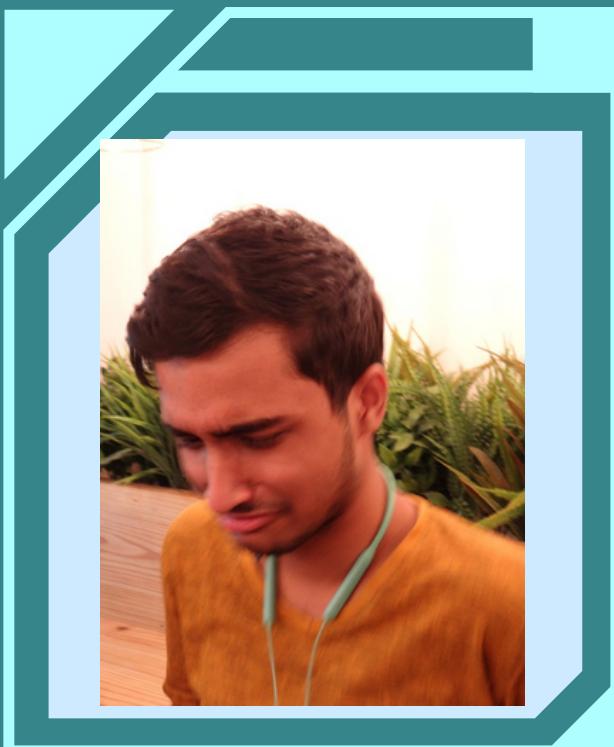




WORKSHOP SYSTEM PROGRAMMING



Meet Our Team



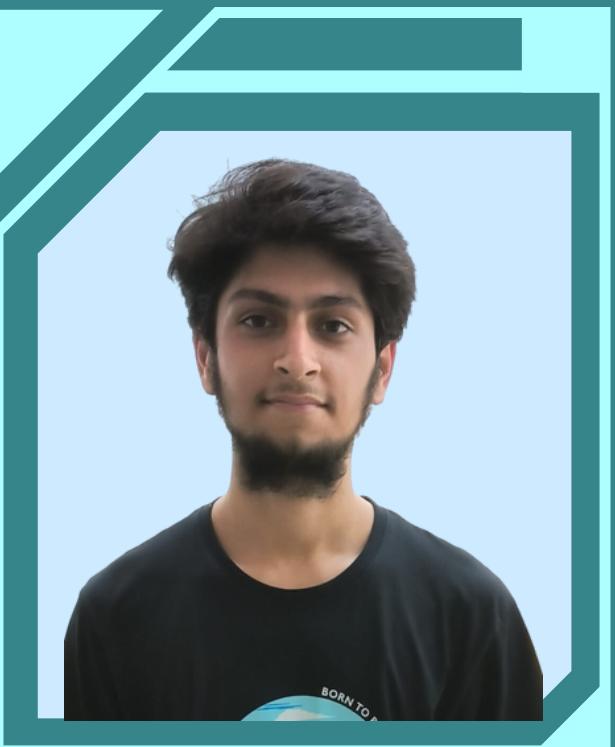
Nishant
CTF Daddy



Zaqi
Secy!



Chandrabhan
h4ck3r



Nimitt

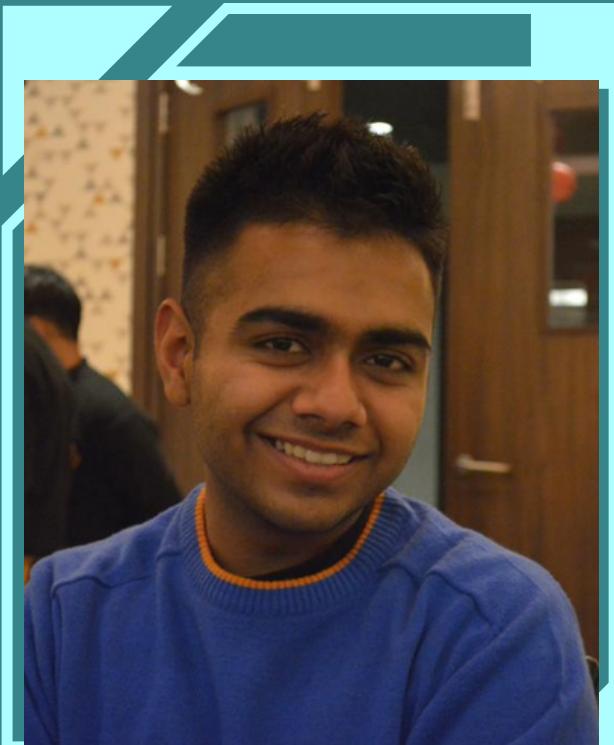
Meet Our Team



Vraj Shah



Jayraj Dulange



Pratyush

Viraj Vekaria
Shreyans Jain
Kishan Ved

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What we Do?

Weekly Project Introductions:

- Projects are introduced on a weekly basis.
- Participation is open to those interested.

What we Do?

Discussion on System Flags:

- Ongoing discussions cover various aspects of system flags.

What we Do?

Upcoming Election Portal Security Project:

- The next project will be focused on enhancing the security of the Election portal.

What we Do?

Expansion into Industrial Projects:

- After completing initial projects, there are plans to undertake industrial projects.

DES Algorithm



Data Encryption Standard

DES is a block cipher and encrypts data in blocks of size of 64 bits each, which means 64 bits of plain text go as the input to DES, which produces 64 bits of ciphertext. The same algorithm and key are used for encryption and decryption, with minor differences. The key length is 56 bits.

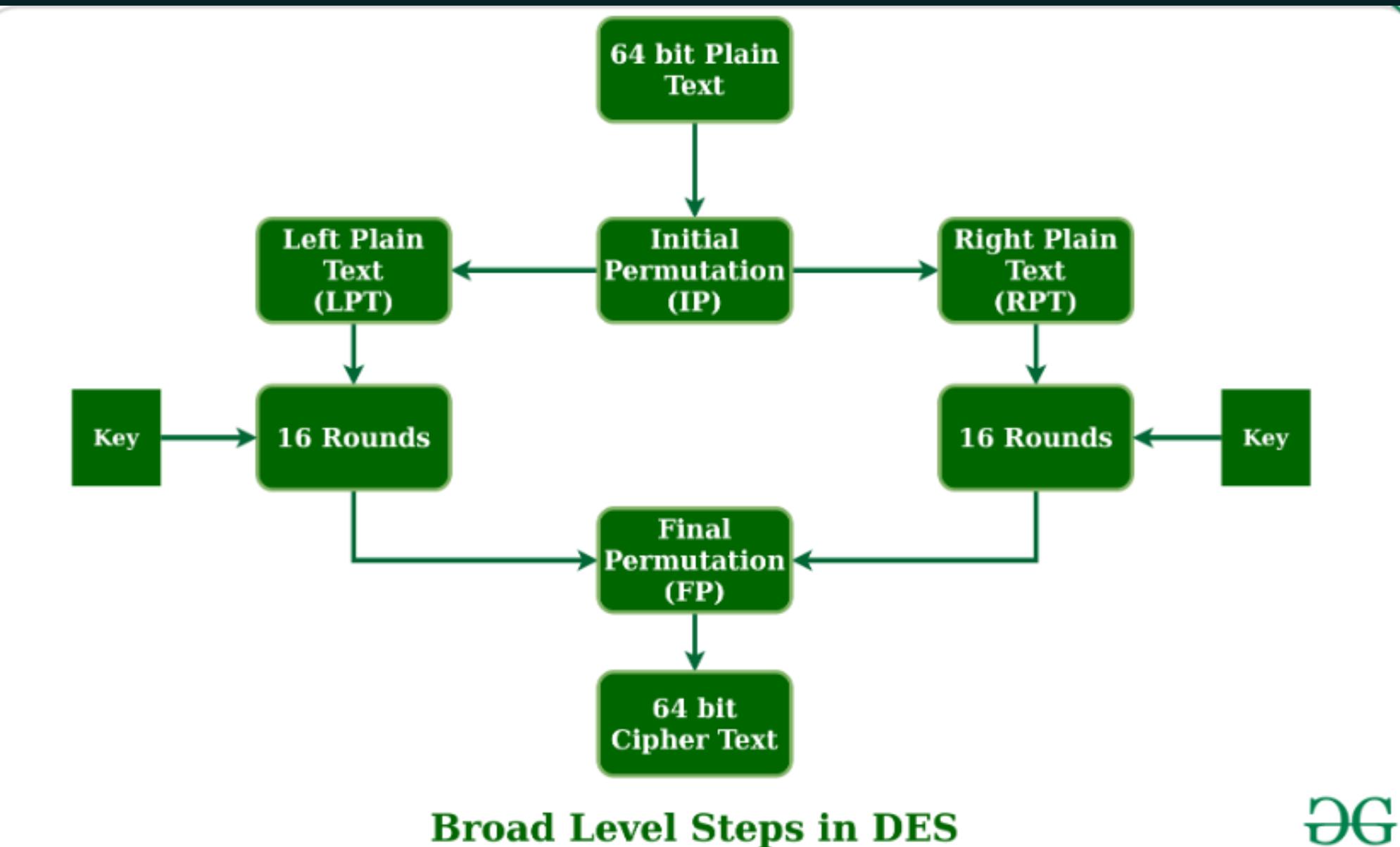
DES Algo.

Discarding parity bits from Key.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

Figure - discording of every 8th bit of original key

DES Algo.



DG

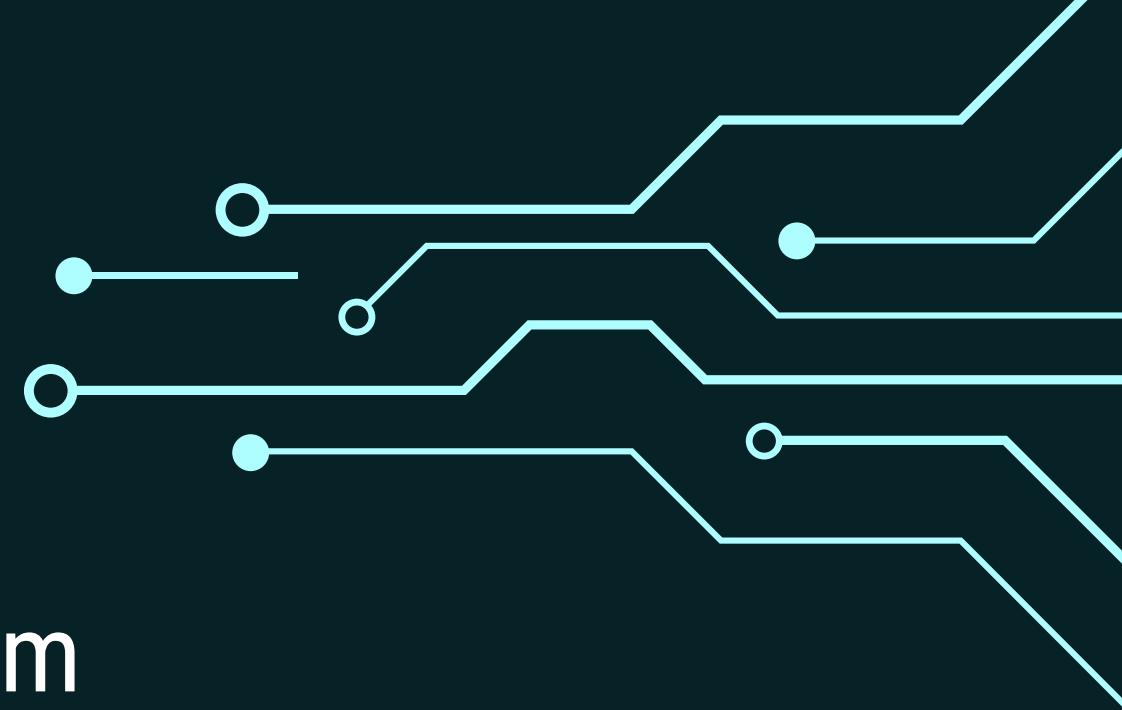
SF Algorithm



Shannon-Fano Algorithm

Shannon Fano Algorithm is an entropy encoding technique for lossless data compression of multimedia. Named after Claude Shannon and Robert Fano, it assigns a code to each symbol based on their probabilities of occurrence. It is a variable-length encoding scheme, that is, the codes assigned to the symbols will be of varying lengths.

Induction Assignment



Write C code for Shannon Fano Algorithm
and
DES Algorithm.
OR
Solve CTF (143.110.250.188) Problems

"Get ready for some thrilling competition! 🏆 The top 3 performers will win exciting prizes, and efforts will earn a spot in the Systems Club. 🎉🚀"

"If you just give it a 'pizza' your effort 🍕, you'll be rewarded with some cheesy success! 🎉😊"



World of Unix

You are Marty McFly. You were working with Doc Brown, who is missing for last 3 days.

You found a hard drive in his lab
and want to see what he was up to.

Check out the his usage history to find some clues.

Boom Boom

After the historic Trinity Test, one name became more famous than any living being ever - that of Sir J. Robert Oppenheimer, the brilliant physicist behind the Manhattan Project. His legacy lives on, and one of his most iconic moments was captured in an image.

In this challenge, your mission is to uncover a hidden flag within this iconic image that holds the key to unlocking the Oppenheimer Enigma.

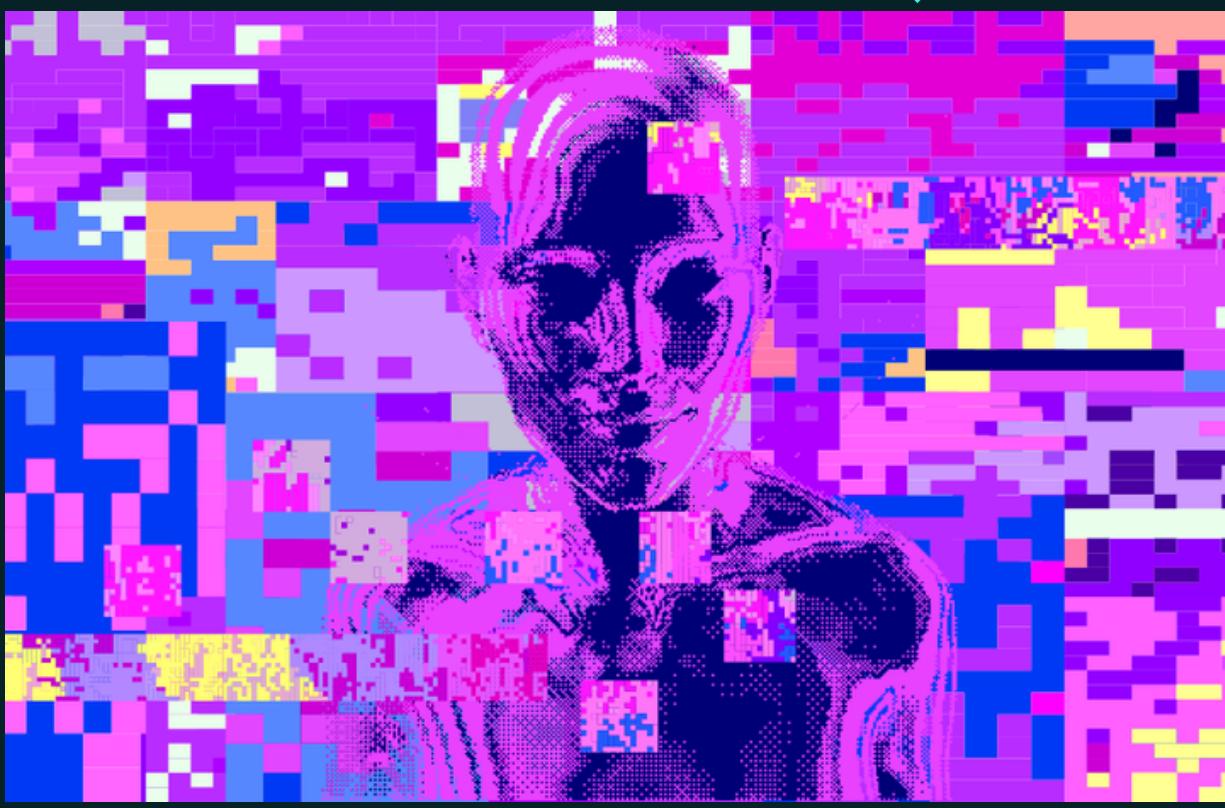
Hints:

While examining this historical image, remember that secrets can be concealed in plain sight.



Download the image file from here: https://drive.google.com/file/d/1NZfgMiLI2-VOxVbtat1x6gTQfze7Ohy-/view?usp=drive_link

Steganography

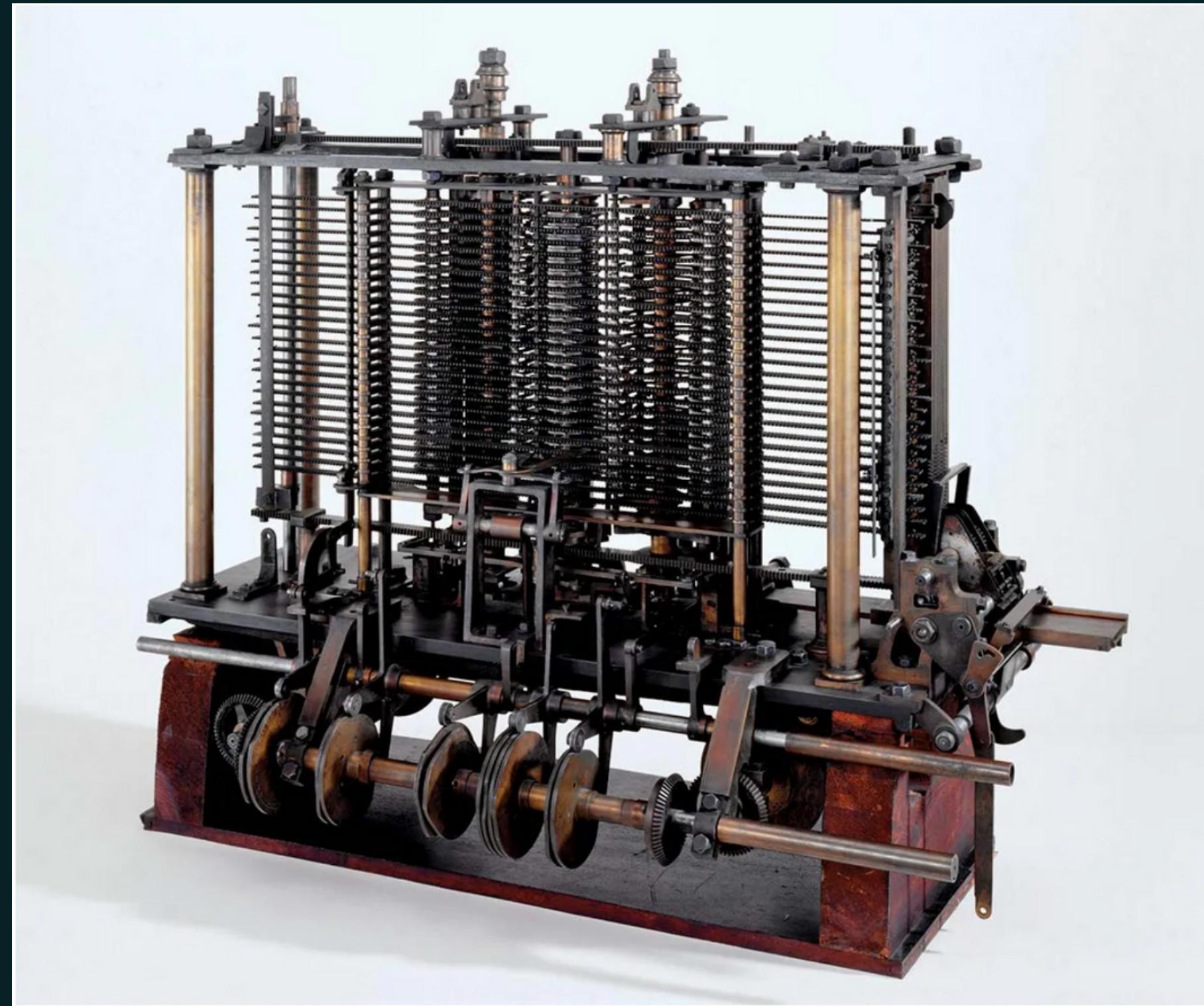


It is the practice of concealing information in plain sig

STRANGE IMAGE

Last night, Rahul discovered an image on his computer that he never remembers installing. Quite strange, isn't it?

Would you mind taking a look at this image file?



LINK TO IMAGE FILE : [FILE.PNG](#)

https://drive.google.com/file/d/1EigRXI_T0DSXrBelByDYMobQ8gzeqsHx/view?usp=sharing

Solution to STRANGE IMAGE

- Search the file properly
- Maybe you find something to Decrypt



GITHUB

ADIOS AMIGOS!

