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Title of the Project – “Software Approach To Enigma Machine”

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ABSTRACT

The Enigma machine is a cipher device developed and used in the early- to mid-20th century to protect commercial, diplomatic, and military communication.

In this project we are trying to show how the actually Enigma machine work based on Software Approachs.

We want to write a program to simulate the Enigma machine to decrypt the secret code produced by the Enigma machine. And also we try to write a program to decrypt the secret code produced by Enigma machine.

An Enigma machine is a electro mechanical rotor cipher machines used for the encryption and decryption of secret massages

INTRODUCTION

We want to write a program to simulate the Enigma machine to decrypt the secret code produced by the Enigma machine.

In this project we have operate the software processing-4 and write the separate program for each part of Enigma machine like as rotor , reflector.

In World War II, the Nazi military employed an encryption scheme that addressed the weakness of substitution ciphers. The scheme, implemented by typewriter sized devices known as Enigma machines, gave the Nazis a tactical advantage that greatly contributed to their early success in the war.

Using computers, the Allies were eventually able to break the Enigma code, giving them an intelligence edge that changed the balance of the war.

MODULES AND METHODS

Modules: - Enigma

▪**EnigmaSim**

▪**Light**

▪**Plugpoint**

▪**Rotor**

Rotating Ciphers

After each letter is encoded, the key is rotated so that the first character is moved to the end.

Example: a b cdef→ hjasdb

Method:- Data encryption and decryption

Encryption is the process of translating plain text data (plaintext) into something that appears to be random and meaningless (ciphertext). Decryption is the process of converting ciphertext back to plaintext.To encrypt more than a small amount of data, symmetric encryption is used.

RESULTS

In Software Approach To Enigma Machine produce a good Result

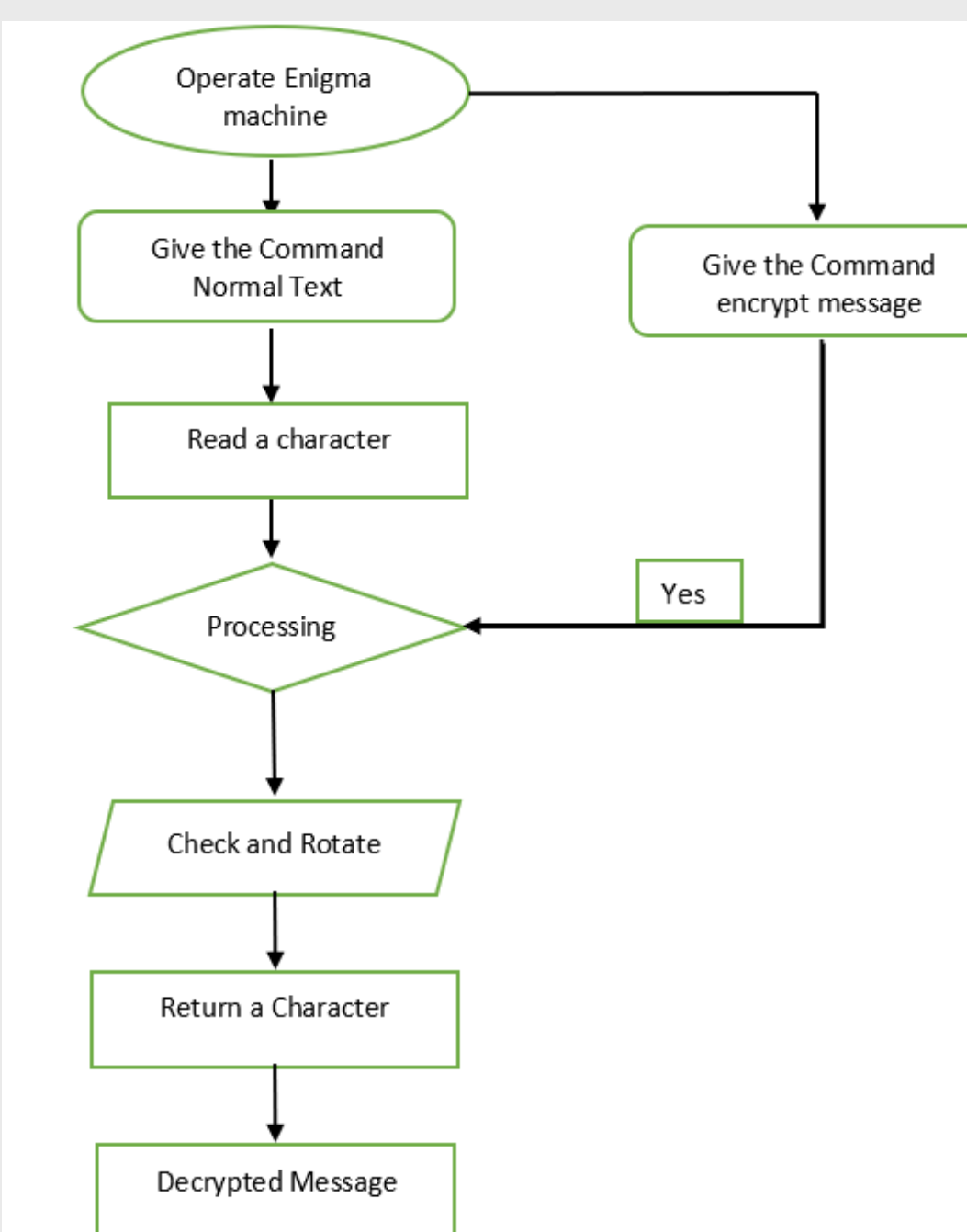
Which is very clear and clarifying that

When we are trying to encrypt or decrypt the any messages using substitution techniques or encryption and decryption method.

That is easly encrypt or decrypt the messages without any error.

This project is very capable to secure the information .

And as you know the Enigma machine is used in world war II so it also use to for our military base where they can use software approach method and communicate with each other.



Message :- VIT BHOPAL

Rotor Position :- 1-5-2

Rotor Dial No. :- 12-1-5

Connection:-

Q-B E-M T-P U-F I-D

O-J A-X S-L G-V C-N

Encrypted Message :- SJJQSXXBV

Manage The Rotor Position And Rotor Dial Number

Decrypted Message :- VIT BHOPAL

DISCUSSION

In future this project may be .

In World War II where the Enigma Machine was used for communication .
Similer this project use in future like for gaming .

If we developed this project a large structure then it will be sufficient for more secure the information.

And it is very reliable for our military base where they can use software approach method and communicate with each others.

CONCLUSIONS

The Enigma was a very save ciphering machine at its time. Because its heavy usage, the operators of the army made errors which allowed the first breaking.
In this technological world it will protect information using incrypt and decrypt method.

REFERENCES

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