

THE ANNUAL TECHNICAL FEST OF ELECTRONICS ENGINEERING DEPARTMENT OF IIT (BHU)

UDYAM'20

I-CHIP

PROBLEM STATEMENT

Task

Design Encryption and Decryption scheme for following modes of operation on Data Encryption Standard (DES) :

- Electronic Code Book Mode
- Cipher Block Chaining Mode
- Cipher Feedback Mode
- Output Feedback Mode

Constraints

Input is in form of 1024×1024 gray scale image with each image pixel value between 0 and 255 Both Encryption and Decryption scheme should be synchronous with base clock of frequency 100 MHz Output should be encrypted image and then obtained decrypted image.

Judging Criteria

- Time to Encrypt and Decrypt image for each mode.
- Resource Utilization (try writing implementable code for it)

Resources

<https://bit.ly/ichip20>



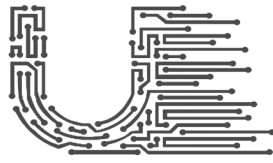
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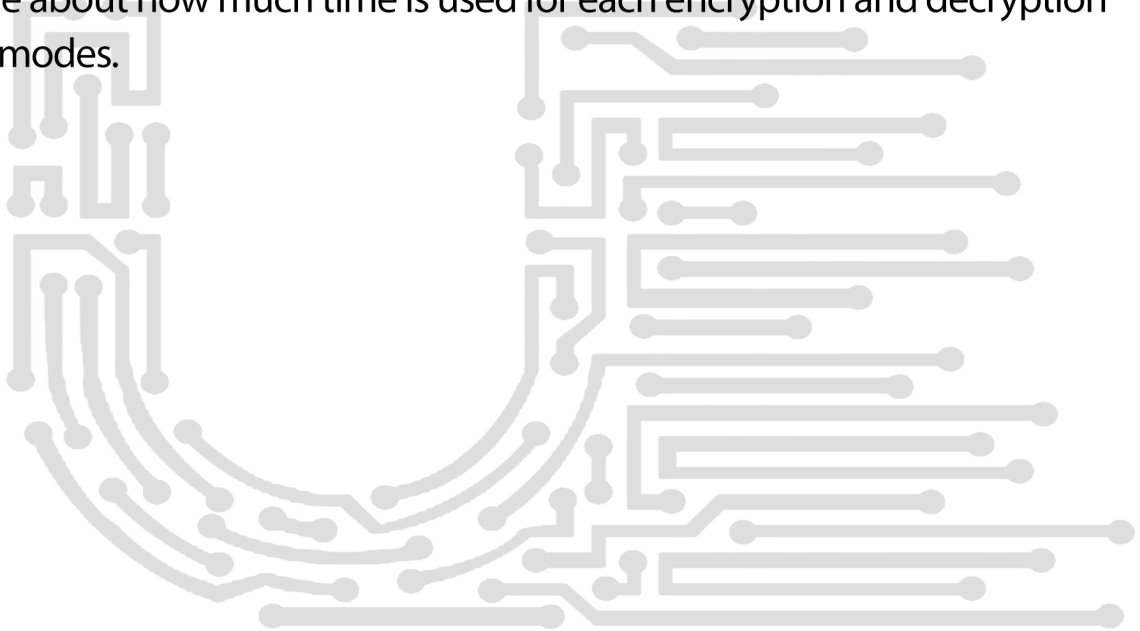
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Submission

Final date for submissions: 5th April 2020

Submit text files of all codes, images as shown in Example in Resources, a text file about how much time is used for each encryption and decryption for all modes.



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