

## Advanced Programming COEN 11

### Project 10

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### \*File Encryption/Decryption

- Due in the 10th week, demo and code.

## Project 10

### \* The program should be executed with the following parameters:

- a.out <key> <file1> <file2>

### \* The program will

- encrypt/decrypt <file1> using the given <key>
- save the encrypted/decrypted version in <file2>

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### \* The key is a number that fits in 8 bits, i.e., a number in the range [0-255].

### \* The program will

- Read <file1>, 100 bytes at a time, into a buffer.
- Encrypt (or decrypt) this buffer into another buffer by XOR-ing each byte with the key.
- Write the modified buffer into <file2>.

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- ★ To handle the files, you will need
  - fopen, fread, fwrite, and fclose.
- ★ To convert the string <key> into a number
  - use function atoi.

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- ★ To test your program:
  - Encrypt <file1> into <file2>.
  - Decrypt <file2> into <file3>.
  - After that, <file1> and <file3> should be the same.
  - Use command cmp to compare them.