/\* Doc

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Description : Steganography

Sample Execution :

1. For Encoding

$ ./a.out -e beautiful.bmp secret.txt stego.bmp

Selected encoding

Read and validate encode arguments is a success

<------Started Encoding------>

Open files is a success

width = 1024

height = 768

Check capacity is a success

Copied bmp header successfully

Encoded magic string successfully

Encoded secret file extn size

Encoded secret file extn

Encoded secret file size

Encoded secret file data

Copied remaining data

<--------Completed encoding-------->

2. For Decoding

$ ./a.out -d stego.bmp decode.txt

Selected decoding

Read and validate decode arguments is a success

<------Started Decoding------>

Open files is a success

Decoded magic string Successfully

Decoded file extension size Succesfully

Decoded Secret File Extension Succesfully

Decoded secret file size Successfully

Decoded secret file data Succuessfully

<---------Completed decoding--------->

\*/

#include <stdio.h>

#include <string.h>

#include "encode.h"

#include "types.h"

#include "common.h"

#include "decode.h"

/\* Passing arguments through command line arguments \*/

int main(int argc, char \*argv[])

{

//checking for the argc

if (argc >= 3)

{

// Function call for check operation type

if (check\_operation\_type(argv) == e\_encode)

{

printf("Selected encoding\n");

// Declare structure variable

EncodeInfo encInfo;

// Read and validate encode arguments

if (read\_and\_validate\_encode\_args(argv, &encInfo) == e\_success)

{

printf("Read and validate encode arguments is a success\n");

printf("<------Started Encoding------>\n");

// Function call for encoding

if (do\_encoding(&encInfo) == e\_success)

{

printf("<--------Completed encoding-------->\n");

}

else

{

printf("Failed to encode\n");

return -1;

}

}

else

{

printf("Read and validate encode arguments is a failure\n");

return -1;

}

}

// Function call for check operation type

else if (check\_operation\_type(argv) == e\_decode)

{

printf("Selected decoding\n");

// Declare structure variables

DecodeInfo decInfo;

if (read\_and\_validate\_decode\_args(argv, &decInfo) == d\_success)

{

printf("Read and validate decode arguments is a success\n");

printf("<------Started Decoding------>\n");

// Function call for do decoding

if (do\_decoding(&decInfo) == d\_success)

{

printf("<---------Completed decoding--------->\n");

}

else

{

printf("Failed to decode\n");

return -1;

}

}

else

{

printf("Read and validate decode arguments is a failure\n");

return -1;

}

}

else

{

printf("Invalid option\nKindly pass for\nEncoding: ./a.out -e beautiful.bmp secret.txt stego.bmp\nDecoding: ./a.out -d stego.bmp decode.txt\n");

}

}

else

{

printf("Error : Kindly pass for\n Encoding: 4 arguments\nDecoding: 3 arguments\n");

}

return 0;

}