Networks

Assignment 1

CRC Implementation

Student Names:

1. Fatema Ahmed Fouad   (Sec.2)
2. Menna't-allah Mohamed Abdallah Eid   (Sec.3)

Procedures:

1. Run exe file
2. Enter input file path.

```
Enter input file Path then press Enter
D:\Menna\4th Elerctrical 1st Term\Subjects\Networks\Assignments\Assignment1\input.txt
```

3. Choose:
   i)   '1' for verification only.

```
Choose '1' for verification only or '2' for alter
1
```

   ii) '2' for alter with verification.
        *Note : bit location starts from 0 most significant left bit.

```
Choose '1' for verification only or '2' for alter
2
```

Example 1:

Frame: 1101011111

Generator: 10011

- Result for verification only.

```
transmitted frame : 11010111110010
Message Verified
Open the (output.txt) file in the same location of the exe folder
```

- Result for alter (bit =3) with verification.

```
transmitted frame : 11010111110010
Message Verified
Enter bit location you want to alter then press Enter
3
frame with altered bit : 11000111110010
Message not Verified
Open the (output.txt) file in the same location of the exe folder
```

- Output.txt file for both cases

output.txt - Notepad

File Edit Format View Help

Tranmitted : 11000111110010

Example 2:
Frame: 11010011101100
Generator: 1011

- Result for verification only.

```
transmitted frame : 11010011101100100
Message Verified
Open the (output.txt) file in the same location of the exe folder
```

- Result for alter (bit =12) with verification.

```
transmitted frame : 11010011101100100
Message Verified
Enter bit location you want to alter then press Enter
12
frame with altered bit : 11010011101110100
Message not Verified
Open the (output.txt) file in the same location of the exe folder
```

- Output.txt file for both cases

output.txt - Notepad

File Edit Format View Help

Tranmitted : 11010011101100100

Example 3:

Frame:110101

Generator:101

- Result for verification only.

```
transmitted frame : 11010111
Message Verified
Open the (output.txt) file in the same location of the exe folder
```

- Result for alter (bit =5) with verification.

```
transmitted frame : 11010111
Message Verified
Enter bit location you want to alter then press Enter
5
frame with altered bit : 11010011
Message not Verified
Open the (output.txt) file in the same location of the exe folder
```

- Output.txt file for both cases

```
output.txt - Notepad

File  Edit  Format  View  Help
Tranmitted : 11010111
```