



CRC

PROGRAMMING ASSIGNMENT

NAMES:

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TEST CASE 1

MESSAGE: 10011101

GENERATOR: 1001

GENERATOR < FILE | VERIFIER

```
Please enter the path of the input file
C:\Users\Eman Ashraf\Desktop\Network_Assignments\test_cases\testcase1\input.txt
Please select which sequence you want:
 1 - generator --> verifier
 2 - generator --> verifier --> alter --> verifier
1
transmitted message : 10011101100
message is correct
```

GENERATOR < FILE | VERIFIER | ALTER 3 | VERIFIER

```
Please enter the path of the input file
C:\Users\Eman Ashraf\Desktop\Network_Assignments\test_cases\testcase1\input.txt
Please select which sequence you want:
 1 - generator --> verifier
 2 - generator --> verifier --> alter --> verifier
2
transmitted message : 10011101100
message is correct
Enter the index of the bit you want to change
3
altered message : 10001101100
message is not correct
```

TEST CASE 2

MESSAGE: 1101011111

GENERATOR: 10011

GENERATOR < FILE | VERIFIER

```
Please enter the path of the input file
C:\Users\Eman Ashraf\Desktop\Network_Assignments\test_cases\testcase2\input.txt
Please select which sequence you want:
 1 - generator --> verifier
 2 - generator --> verifier --> alter --> verifier
1
transmitted message : 1101011110010
message is correct
```

GENERATOR < FILE | VERIFIER | ALTER 3 | VERIFIER

```
Please enter the path of the input file
C:\Users\Eman Ashraf\Desktop\Network_Assignments\test_cases\testcase2\input.txt
Please select which sequence you want:
 1 - generator --> verifier
 2 - generator --> verifier --> alter --> verifier
2
transmitted message : 1101011110010
message is correct
Enter the index of the bit you want to change
5
altered message : 1101001110010
message is not correct
```

Error Handling

OPENING FILE

```
Please enter the path of the input file
C:\Users\Eman Ashraf\Desktop\Network_Assignments\test_cases\testcase2\file.txt
Couldn't open the file!
Please enter the path of the input file
```

INVALID CHOICE

```
Please enter the path of the input file
C:\Users\Eman Ashraf\Desktop\Network_Assignments\test_cases\testcase2\input.txt
Please select which sequence you want:
 1 - generator --> verifier
 2 - generator --> verifier --> alter --> verifier
5
Invalid input!
Please select which sequence you want:
 1 - generator --> verifier
 2 - generator --> verifier --> alter --> verifier
```

INVALID INDEX

```
Please enter the path of the input file
C:\Users\Eman Ashraf\Desktop\Network_Assignments\test_cases\testcase2\input.txt
Please select which sequence you want:
 1 - generator --> verifier
 2 - generator --> verifier --> alter --> verifier
2
transmitted message : 11010111110010
message is correct
Enter the index of the bit you want to change
100
Index out of range!
Enter the index of the bit you want to change
```