

Stream cipher Practical

```
#include<iostream>

#include<string>

using namespace std;

#define MAX 100

int XOR(int a, int b)
{
    int value = 1;
    if(a==b)
    {
        value = 0;
    }
    return value;
}

void encryption()
{
    int text[MAX];
    int key[MAX];
    int len;

    cout<<"Enter the length of the text : ";
    cin>>len;
```

```
    cout<<" Enter Plain text :";  
    for (int i=0; i<len; i++)  
    {  
  
        cin>>text[i];  
    }  
  
    cout<<"\n Enter key values : ";  
    for (int i=0; i<len; i++)  
    {  
  
        cin>>key[i];  
    }  
  
    for (int i=0; i<len; i++)  
    {  
  
        text[i] = XOR(text[i], key[i]);  
    }  
  
    cout<<"\n Encrypted Message : ";  
    for (int i=0; i<len; i++)  
    {  
  
        cout<<text[i]<<" ";  
    }  
    cout<<endl;  
}
```

```
void decryption()
{
    int text[MAX];
    int key[MAX];
    int len;

    cout<<"\n\n Enter the length of the text : ";
    cin>>len;

    cout<<"\n Enter Cipher text : ";
    for (int i=0; i<len; i++)
    {

        cin>>text[i];
    }

    cout<<"\n Enter key values :";
    for (int i=0; i<len; i++)
    {

        cin>>key[i];
    }

    for (int i=0; i<len; i++)
    {
```

```
        text[i] = XOR(text[i], key[i]);
    }

    cout<<"\nDecrypted Message : ";
    for (int i=0; i<len; i++)
    {
        cout<<text[i]<<" ";
    }
    cout<<endl;
}
```

```
int main()
{

    encryption();

    decryption();

    return 0;
}
```

Output SS:

C:\Windows\SYSTEM32\cmd.exe

1
1
1
1
1

Encrypted Message : 1 1 1 1 0 1 1 1

Enter the length of the text : 8

Enter Cipher text : 1

1
1
1
0
1
1
1

Enter key values :0

0
0
0
1
1
1
1

Decrypted Message : 1 1 1 1 1 0 0 0

(program exited with code: 0)

Press any key to continue . . .