

```
#include<iostream>
```

```
#include<string>
```

```
Using namespace std;
```

```
    string ciphertext,text;
```

```
    char x[26],y[26];
```

```
x[0]='A',x[1]='B',x[2]='C',x[3]='D',x[4]='E',x[5]='F',x[6]='G',  
x[7]='H',x[8]='I',x[9]='J',x[10]='K',x[11]='L';
```

```
x[12]='M',x[13]='N',x[14]='O',x[15]='P',x[16]='Q',x[17]='R',x[18]='S',  
x[19]='T',x[20]='U',x[21]='V',x[22]='W',x[23]='X',x[24]='Y',x[25]='Z';
```

```
y[25]='A',y[24]='B',y[23]='C',y[22]='D',y[21]='E',y[20]='F',y[19]='G',  
y[18]='H',y[17]='I',y[16]='J',y[15]='K',y[14]='L';
```

```
y[13]='M',y[12]='N',y[11]='O',y[10]='P',y[9]='Q',y[8]='R',y[7]='S',  
y[6]='T',y[5]='U',y[4]='V',y[3]='W',y[2]='X',y[1]='Y',y[0]='Z';
```

```
    int choice,c;
```

```
    cout<<"Ahlan Ya User Ya Habibi "<<"\n";
```

```
    cout<<"what do you like to do today ?!"<<"\n";
```

```
    cout<<"1-Cipher a message"<<"\n";
```

```
    cout<<"2-Decipher a message"<<"\n";
```

```
    cout<<"3-End"<<"\n";
```

```
    cin>>choice;
```

```
    if (choice==1)
```

```
    {
```

```
        cout<<"enter the plain text : ";
```

```
        cin.ignore();
```

```
        getline(cin,text);
```

```
        cout<<endl;
```

```
        for (int j=0; j<text.size(); j++)
```

```
        {
```

```
            text[j]=char(toupper(text[j]));
```

```
            for (int i=0; i<26; i++)
```

```
            {
```

```
                if (text[j]==x[i])
```

```
                {
```

```
                    ciphertext+=y[i];
```

```
                }
```

```
            }
```

```
            if (text[j]==' ')
```

```
            {
```

```
                ciphertext+=' ';
```

```
            }
```

```
        }
```

```
        cout<<ciphertext;
```

```
    }
```

```

else if (choice==2)
{
    cout<<"enter the cipher text : ";
    cin.ignore();
    getline(cin,ciphertext);
    cout<<endl;
    for (int j=0; j<ciphertext.size(); j++)
    {
        ciphertext[j]=char(toupper(ciphertext[j]));
        for (int i=0; i<26; i++)
        {
            if (ciphertext[j]==y[i])
            {
                text+=x[i];
            }
        }
        if (ciphertext[j]==' ')
        {
            text+=' ';
        }
    }
    cout<<text;
}
else {
    cout<<"_____END_____"<<"\a";
}

```