

## Program :

```
#include <bits/stdc++.h>
using namespace std;

string encryptNormal(string text, int s)
{
    string result = "";
    for (int i = 0; i < text.length(); i++) {
        if (text[i] == ' ')
            result += ' ';
        else if (isupper(text[i]))
            result += char(int(text[i] + s - 65) % 26 + 65);
        else
            result += char(int(text[i] + s - 97) % 26 + 97);
    }
    return result;
}

string decryptNormal(string text, int s)
{
    string result = "";
    for (int i = 0; i < text.length(); i++) {
        if (text[i] == ' ')
            result += ' ';
        else if (isupper(text[i]))
            result += char(int(text[i] - s - 65) % 26 + 65);
        else
            result += char(int(text[i] - s - 97) % 26 + 97);
    }
    return result;
}

string encryptSpecial(string text, int s)
{
    string result = "";
    for (int i = 0; i < text.length(); i++) {
        if (text[i] == ' ')
            result += ' ';
        else
            result += char(int(text[i] + s - 33) % 93 + 33);
    }
}
```

```

    }
    return result;
}

string decryptSpecial(string text, int s)
{
    string result = "";
    for (int i = 0; i < text.length(); i++) {
        if (text[i] == ' ')
            result += ' ';
        else
            result += char(int(text[i] - s - 33) % 93 + 33);
    }
    return result;
}

int main()
{
    string text;
    int key, choice;
    cout<<"Enter plain text :";
    getline(cin, text);
    cout<<"Enter the key :";
    cin>>key;

    cout<<"\nFor simple conversion Enter 0\n"<<"For special character
conversion Enter 1"<<endl;
    cin>>choice;
    if(choice){
        string encrypted = encryptSpecial(text, key);
        cout << "\nCipher text: " << encrypted<<endl;
        cout << "Derypted text: " << decryptSpecial(encrypted, key)<<endl;
    }
    else{
        string encrypted = encryptNormal(text, key);
        cout << "\nCipher text: " << encrypted<<endl;
        cout << "Derypted text: " << decryptNormal(encrypted, key)<<endl;
    }
    return 0;
}

```

## Output :

```
PS C:\Users\Idris\Documents\College works\CSS> cd "c:\Users\Idris\Documents\College works\CSS" & .\CaesarCipher.ps1
CaesarCipher } ; if ($?) { .\CaesarCipher }
Enter plain text :Computer Engineering
Enter the key :6

For simple conversion Enter 0
For special character conversion Enter 1
0

Cipher text: Iusvazkx Ktmotkkxotm
Derypted text: Comp[ter Engineering
PS C:\Users\Idris\Documents\College works\CSS> cd "c:\Users\Idris\Documents\College works\CSS" & .\CaesarCipher.ps1
CaesarCipher } ; if ($?) { .\CaesarCipher }
Enter plain text :Computer Engineering
Enter the key :4
Enter the key :4
For simple conversion Enter 0
For special character conversion Enter 1
0

Cipher text: Gsqtyxiv Irkmriivmrk
Derypted text: Computer Engineering
PS C:\Users\Idris\Documents\College works\CSS> cd "c:\Users\Idris\Documents\College works\CSS" & .\CaesarCipher.ps1
CaesarCipher } ; if ($?) { .\CaesarCipher }
Enter plain text :(Mumbai-University);
Enter the key :6

For simple conversion Enter 0
For special character conversion Enter 1
1

Cipher text: .S{shgo3[to|kxyoz"/A
Derypted text: (Mumbai-UniversitL);
PS C:\Users\Idris\Documents\College works\CSS> █
```