CNS LAB

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Assignment 1

Aim - To encrypt the given plain text using Caesar Cipher and then decrypt it to get plain text again.

It is substitution cipher, i.e., each letter of a given text is replaced by a letter with a fixed number of positions down the alphabet
Code:

```
string s;
cout << "Enter plain text" <<

endl; getline(cin, s);

string x;
for (int i = 0; i < s.length(); i++)
    if (s[i] != ' ')
        x += s[i];
s = x;

int k;
cout << "Enter key" << endl;
cin >> k;

cout << "\nPlain text is: " << s <<
endl; cout << "Key is: " << k << endl;
for (int i = 0; i < s.length(); i++)
{
    int val = s[i] - 'a';
    val = (val + k) % 26;
    char ch = 'a' + val;
    s[i] = ch;
}
```

```
cout << "\nCipher text is: " << s;

for (int i = 0; i < s.length(); i++)
{
    int val = s[i] - 'a';
    val = (val - k + 26) % 26;
    char ch = 'a' + val;
    s[i] = ch;
}
cout << "\n\nPlain text after decription is: " << s;
```

Output: