

## AIM: To implement Caesar Cipher Program

```
package caesar_cipher;
import javax.swing.JOptionPane;
public class Caesar_Cipher
{
    public static void main(String[] args)
    {
        String plain_text;
        String key;
        String cipher1, cipher2;
        plain_text=JOptionPane.showInputDialog("Input the string to encrypt:");
        key=JOptionPane.showInputDialog("Input the key:");
        cipher1=encrypt(plain_text,key);
        JOptionPane.showMessageDialog (null, "Cipher Text is " + cipher1, "Encryption
        Process", JOptionPane.PLAIN_MESSAGE);
        cipher2=decrypt(cipher1,key);
        JOptionPane.showMessageDialog (null, "Plain Text is " + cipher2, "Decryption Process",
        JOptionPane.PLAIN_MESSAGE);
    }
    public static String encrypt(String str1,String key1)
    {
        int keylen=Integer.parseInt(key1);
        String encrypted="";
        for(int i=0;i<str1.length();i++)
        {
            int c=str1.charAt(i);

            if(Character.isUpperCase(c))
            {
                c=c+(keylen%26);
                if(c>'Z')
                    c=c-26;
            }
            else if(Character.isLowerCase(c))
            {
                c=c+(keylen%26);

                if(c>'z')
                    c=c-26;
            }
            encrypted+=(char)c;
        }
        return encrypted;
    }
    public static String decrypt(String str1,String key1)
    {
        int keylen=Integer.parseInt(key1);
        String decrypted="";
        for(int i=0;i<str1.length();i++)
        {
            int c=str1.charAt(i);
            if(Character.isUpperCase(c))
            {
```

```

        c=c-(keylen%26);
        if(c<'A')
            c=c+26;
    }
    else if(Character.isLowerCase(c))
    {
        c=c-(keylen%26);
        if(c<'a')
            c=c+26;
    }
    decrypted+=(char)c;
}
return decrypted;
}
}

```

### Output:

