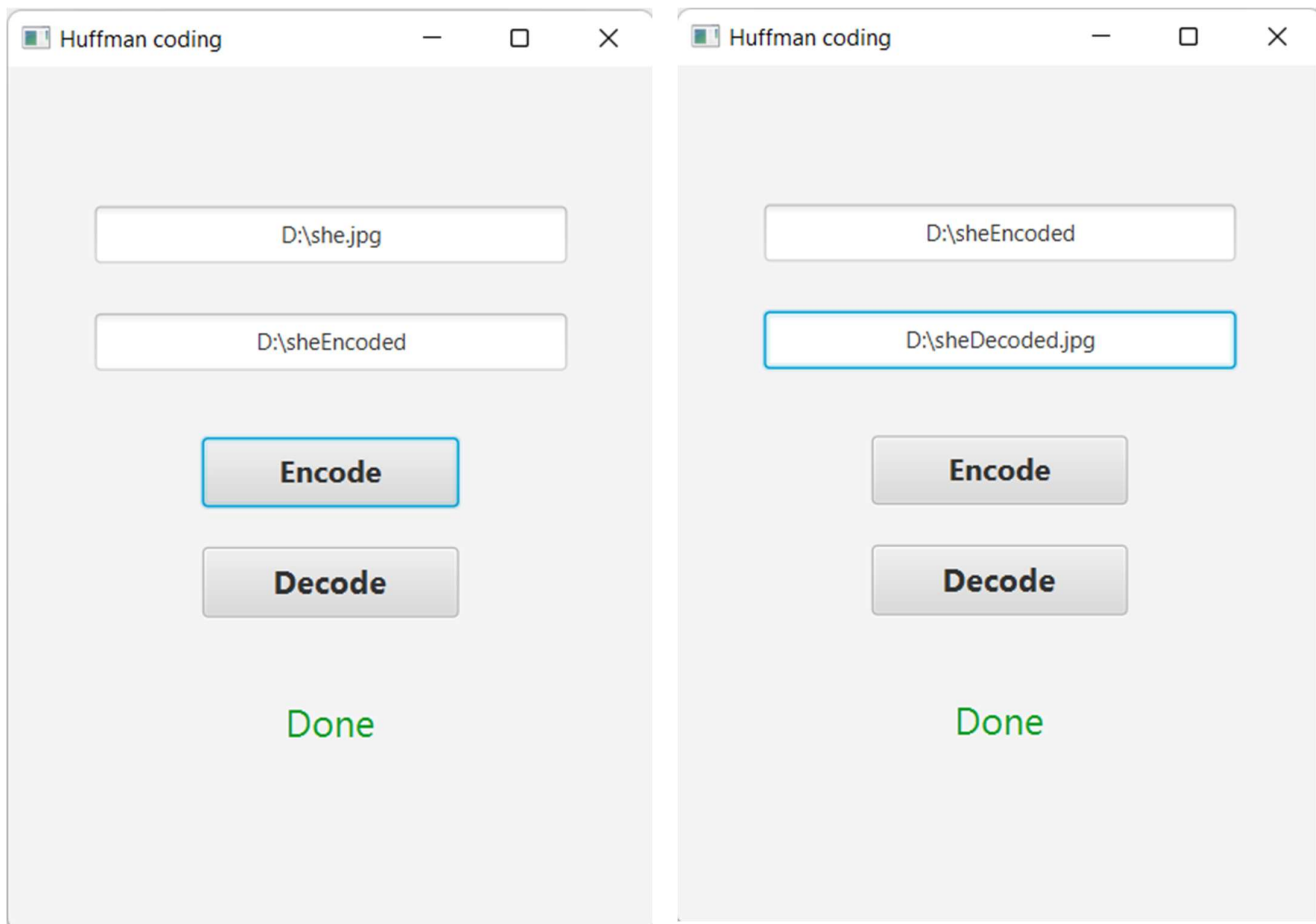Program GUI :

Program output :