```
import java.util.HashMap;
import java.util.Map;

public class CaesarCipher {
    public static void main(String[] args) {
        String allLetters = "abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ";
        int key = 4;

        // Create dictionaries for encryption and decryption
        Map<Character, Character> encryptDict = createCipherDict(allLetters, key);
        Map<Character, Character> decryptDict = createCipherDict(allLetters, -key);

        String plainText = "I am studying Data Encryption";
        String cipherText = transformText(plainText, encryptDict);
        String decryptedText = transformText(cipherText, decryptDict);

        System.out.println("Cipher Text: " + cipherText);
        System.out.println("Recovered plain text: " + decryptedText);
    }

    // Method to create the cipher dictionary based on the shift key
    private static Map<Character, Character> createCipherDict(String letters, int key) {
        Map<Character, Character> dict = new HashMap<>();
        int len = letters.length();
        for (int i = 0; i < len; i++) {
            dict.put(letters.charAt(i), letters.charAt((i + key + len) % len));
        }
        return dict;
    }

    // Method to transform text using the given dictionary
    private static String transformText(String text, Map<Character, Character> dict) {
        StringBuilder transformedText = new StringBuilder();
        for (char c : text.toCharArray()) {
            transformedText.append(dict.getOrDefault(c, c));
        }
        return transformedText.toString();
    }
}
```