

- **Program Code:**

```
import java.io.*;

class GFG {

    public static char normalChar[]

        = { 'a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i',

            'j', 'k', 'l', 'm', 'n', 'o', 'p', 'q', 'r',

            's', 't', 'u', 'v', 'w', 'x', 'y', 'z' };

    public static char codedChar[]

        = { 'Q', 'W', 'E', 'R', 'T', 'Y', 'U', 'I', 'O',

            'P', 'A', 'S', 'D', 'F', 'G', 'H', 'J', 'K',

            'L', 'Z', 'X', 'C', 'V', 'B', 'N', 'M' };

    public static String stringEncryption(String s)

    {

        String encryptedString = "";

        for (int i = 0; i < s.length(); i++) {

            for (int j = 0; j < 26; j++) {

                if (s.charAt(i) == normalChar[j])

                {

                    encryptedString += codedChar[j];

                    break;

                }

                if (s.charAt(i) < 'a' || s.charAt(i) > 'z')

                {

                    encryptedString += s.charAt(i);

                    break;

                }

            }

        }

        return encryptedString;

    }

}
```

```
    }

    public static String stringDecryption(String s)
    {

        String decryptedString = "";
        for (int i = 0; i < s.length(); i++)
        {
            for (int j = 0; j < 26; j++) {
                if (s.charAt(i) == codedChar[j])
                {
                    decryptedString += normalChar[j];
                    break;
                }
                if (s.charAt(i) < 'A' || s.charAt(i) > 'Z')
                {
                    decryptedString += s.charAt(i);
                    break;
                }
            }
        }
        return decryptedString;
    }

    public static void main(String args[])
    {
        String str = "Pratik Bangal";
        System.out.println("Plain text: " + str);
        System.out.println("");
        String encryptedString = stringEncryption(str.toLowerCase());
```

```
System.out.println("Encrypted message: "  
                    + encryptedString);
```

```
System.out.println("Decrypted message: "  
                    + stringDecryption(encryptedString));
```

```
}
```

```
}
```

- **Output:**

Output Clear

```
java -cp /tmp/5MDWywq860 GFG  
Plain text: Pratik Bangal  
  
Encrypted message: HKQZ0A WQFUQS  
Decrypted message: pratik bangal  
|
```