- **Encryption:**
- Program Code:

```java
import java.util.Scanner;


public class CaesarCipherJava {
public static void main(String...s){
String message, encryptedMessage = "";
int key;
char ch;
Scanner sc = new Scanner(System.in);
System.out.println("Enter a message: ");
message = sc.nextLine();
System.out.println("Enter key: ");
key = sc.nextInt();


for(int i = 0; i < message.length(); ++i){
ch = message.charAt(i);
if(ch >= 'a' && ch <= 'z'){
        ch = (char)(ch + key);


        if(ch > 'z'){
            ch = (char)(ch - 'z' + 'a' - 1);
        }


        encryptedMessage += ch;
    }
    else if(ch >= 'A' && ch <= 'Z'){
        ch = (char)(ch + key);


        if(ch > 'Z'){
            ch = (char)(ch - 'Z' + 'A' - 1);
```

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```
            }


            encryptedMessage += ch;

        }

        else {

         encryptedMessage += ch;

        }

    }

    System.out.println("Encrypted Message = " + encryptedMessage);

    }

    }
```

- Output:

```
Output                                                    Clear

java -cp /tmp/5MDWywq86O CaesarCipherJava
Enter a message: pratik bangal
Enter key:
3
Encrypted Message = sudwln edqjdo
```

- **Decryption:**
- Program Code:

```java
import java.util.Scanner;

public class CaesarCipherJava {
public static void main(String...s){
String message, decryptedMessage = "";
int key;
char ch;
Scanner sc = new Scanner(System.in);
System.out.println("Enter a message: ");
message = sc.nextLine();
System.out.println("Enter key: ");
key = sc.nextInt();

for(int i = 0; i < message.length(); ++i){
ch = message.charAt(i);
if(ch >= 'a' && ch <= 'z'){
        ch = (char)(ch - key);

        if(ch < 'a'){
            ch = (char)(ch + 'z' - 'a' + 1);
        }

        decryptedMessage += ch;
    }
    else if(ch >= 'A' && ch <= 'Z'){
        ch = (char)(ch - key);

        if(ch < 'A'){
            ch = (char)(ch + 'Z' - 'A' + 1);
```

```
                    }


            decryptedMessage += ch;

        }

        else {

         decryptedMessage += ch;

        }

    }

    System.out.println("Decrypted Message = " + decryptedMessage);

    }

    }
```

- Output:

```
Output                                                    Clear

java -cp /tmp/5MDWywq860 CaesarCipherJava
Enter a message: pratik bangal
Enter key:
2
Decrypted Message = npyrgi zyleyj
```