CAESAR CIPHER

Aim: To implement encryption algorithm using Caesar Cipher technique.

Algorithm:

- Step 1: Prompt the user to enter a message to encrypt (text) and the encryption key (key).
- Step 2: Iterate through each character in text, applying the Caesar Cipher encryption.
- Step 3: Print the encrypted message.

Program:
```c
#include <stdio.h>
int main() {
char text[500];
int key;

   printf("Enter a message to encrypt: ");
scanf("%s", text);

   printf("Enter the key: ");
   scanf("%d", &key);

   for (int i = 0; text[i] != '\0'; ++i) {
char ch = text[i];

     if ('a' <= ch && ch <= 'z')
ch = (ch - 'a' + key) % 26 + 'a';
else if ('A' <= ch && ch <= 'Z')
```

```c
        ch = (ch - 'A' + key) % 26 + 'A';
    else if ('0' <= ch && ch <= '9')
            ch = (ch - '0' + key) % 10 + '0';

        text[i] = ch;
    }

    printf("Encrypted message: %s", text);

    return 0;
}
```

Output:

```
Enter a message to encrypt: swathi
Enter the key: 4
Encrypted message: waexlm

=== Code Execution Successful ===
```

Result: