Step 1: Start

Step 2: **Initialize Variables**

2.1:Define MAX as 100.

2.2:Declare message[MAX], pt[MAX], and ct[MAX] as character arrays.

2.3:Declare len as 0 (to track valid characters).

2.4:Declare key, pi, and ci as integers.

Step 3: **Input** the Mesaage and Key

3.1:Prompt "Enter a message" and store input in message.

3.2:Prompt "Enter a key" and store input in key.

Step 4:**Process Message**

4.1:For each character in message,

If alphabetic, convert to uppercase and store in pt[len], then increment len.

Step 5: **Encrypt Message**:

5.1:For each character in pt (up to len):

Compute pi as the position of pt[i] in the alphabet.

5.2:Calculate ci = (pi + key) % 26.

5.3:Convert ci back to a character and store in ct[i].

Step 6: **Output Encrypted Message**:

6.1:Print "The encrypted message is:" followed by ct.

Step 7: Stop