C program to check whether a given string is palindrome or not without using builtin function.

Algorithm -

Step1 : Start

Step 2 : input str

Step3 : Repeat for (i=0; str[i]!='o'; i++)

      len++

Step 4: Repeat for (i= len -1; i>=0; i++)

    a [len-i-1] = str[i]

Step 5: Repeat for (i=0; i< len; i++)

    if (a[i]!= str[i])

    flag = 0

Step 6: if (flag == 1)

    Display string is a palindrome

    else

    display string is not a palindrome

Step 7: Stop

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```
for (i=0; str[i]='0'; i++) ──T──┐
        │                       │
        ▼                       │
    [ len++ ]                   │
        │◄──────────────────────┘
        ▼
for (i=len-1; i>=0; i--) ──T──┐
        │                     │
        ▼                     │
 [ a[len-i-1] = str[i] ]      │
        │◄────────────────────┘
        ▼
for (i=0; i<len; i++) ──T──────────────┐
 a[len-i-1] = str[i]                    │
        │                               │
        ▼                               │
      ◇ if                              │
  F ◄─  a[i] !=  ──T──► [ flag = 0 ]    │
       str[i] ?                │        │
        │                      │        │
        │◄─────────────────────┘        │
        ▼◄─────────────────────────────┘
      ◇ if
  F ◄─ (flag  ──T──► Display string is
        ==1)          a palindrome
        │               │
        ▼               │
  y string is           │
  Palindrome            │
        │◄──────────────┘
        ▼
     ( stop )
```