ALGORITHM

• Step-1 :- START  
• Step-2 :- Create a class named as pallin.

• Step-3 :- Create a method named as isPallindrome and pass a string named word as a parameter. In this function check whether the string is pallindrome or not.

• Step-4 :- Create a method named as makePalindrome and pass a string named word as a parameter. In this function, declare variables to store length and the last character of the string word in len and lastChar respec-tively. Using a StringBuffer class and a for-loop, append the string word to the StringBuffer object sb and then append the last character of the string word to the StringBuffer object sb. Then, return the StringBuffer object sb as a string.

• Step-5 :- Create a method named as main. In this function, using Scanner class take the input of the string Str as input. Then, call the method isPallindrome and pass the string word as a parameter. If the method returns true, then print the string Str. Then, call the method makePalindrome and pass the string word as a parameter. Then, print the string returned by the method makePalindrome.

• Step-6 :- END

VD TABLE

|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No. | Variable | Data Type | Description |
| 1  2 | Str  word | String  String | To store the input string  To store the words of the string  To store the string without front and back spaces  To store the length of the string  To store the last character of the string  Used in for-loop  To check whether the word is pallindrome or not  To check whether the word is pallindrome or not  To store the string returned by the method |
| 3 | str | String |
| 4 | len | int |
| 5 | lastChar | char |
| 6  7 | i  isPalindrome | int  boolean |
| 8 | palin | boolean |
| 9 | palinWord | String |
| 10 | convertedStr | String | makePalindrome  To store the converted string |

OUTPUT

