EX-1.1

Title :
　　Given an array of strings words, return the first palindromic string in the array. If there is no such string, return an empty string "". A string is palindromic if it reads the same forward and backward.

Aim:
　　To design and implement a Python program that reads a list of strings from the user and returns the **first palindromic string** in the list.

Procedure:

1. Prompt the user to enter words separated by spaces.

2. Store the input words in a list.

3. Iterate through the list of words one by one.

4. For each word, check if it is equal to its reverse.

5. If a palindrome is found, return that word immediately.

6. If no palindrome is found after checking all words, return an empty string.

7. Display the result.

Algorithm:

1. **Start**

2. Read the input (a sequence of words separated by spaces).

3. Split the input into a list of strings words.

4. For each word in words:

   - If word == word[::-1], then **return word**.

5. If no palindrome is found, return "".

6. Print the result.

7. **End**

Input:

Enter the strings : abc car ada racecar cool

Output:

First Palindromic String: ada

Program :

```
def firstPalindrome(words):
    for word in words:
        if word == word[::-1]:  # check if palindrome
            return word
    return ""

words = input("Enter words separated by spaces: ").split()
result = firstPalindrome(words)
print("First Palindromic String:", result if result else '""')
```

Performance Analysis:

Time complexity : O(n.m)

Space complexity: O(1)

program output:

```
Python 3.13.5 (main, Jun 25 2025, 18:55:22) [GCC 14.2.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> def firstPalindrome(words):
...     for word in words:
...         if word == word[::-1]:   # check if palindrome
...             return word
...     return ""
...
...
... # Taking input from the user
... words = input("Enter words separated by spaces: ").split()
...
... # Call the function and print result
... result = firstPalindrome(words)
... print("First Palindromic String:", result if result else '""')
...
Enter words separated by spaces: abc car ada racecar cool
First Palindromic String: ada
>>> def firstPalindrome(words):
...     for word in words:
...         if word == word[::-1]:   # check if palindrome
...             return word
...     return ""
...
...
... # Taking input from the user
... words = input("Enter words separated by spaces: ").split()
...
... # Call the function and print result
... result = firstPalindrome(words)
... print("First Palindromic String:", result if result else '""')
...
Enter words separated by spaces: notapalindrome racecar
First Palindromic String: racecar
>>> |
```

Result :

Thus the given program to find the first palindromic string in the array is executed and got output successfully.