Encoding a word into Pig Latin

Design a program to take a word as an input, and then encode it into a Pig Latin. A Pig Latin is an encrypted word in English, which is generated by doing following alterations:

The first vowel occurring in the input word is placed at the start of the new word along with the remaining alphabets of it. The alphabets present before the first vowel are shifted at the end of the new word followed by “ay”.
Examples:

```
Input: s = "paris"
Output: arispay

Input: s = "amazon"
Output: amazonay
```

Recommended: Please try your approach on *{IDE}* first, before moving on to the solution.


```
1) Find index of first vowel.
2) Create pig latin by appending following three.
.....a) Substring after starting with the first vowel
........till end.
.....b) Substring before first vowel.
.....c) "ay".
```

CPP

```cpp
// C++ program to encode a word to a Pig Latin.
#include <bits/stdc++.h>
using namespace std;

bool isVowel(char c)
{
    return (c == 'A' || c == 'E' || c == 'I' ||
            c == 'O' || c == 'U' || c == 'a' ||
            c == 'e' || c == 'i' || c == 'o' ||
            c == 'u');
}

string pigLatin(string s)
{
    // the index of the first vowel is stored.
    int len = s.length();
    int index = -1;
    for (int i = 0; i < len; i++) {
        if (isVowel(s[i])) {
            index = i;
            break;
        }
    }

    // Pig Latin is possible only if vowels
    // is present
    if (index == -1)
        return "-1";

    // Take all characters after index (including
    // index). Append all characters which are before
    // index. Finally append "ay"
    return s.substr(index) + s.substr(0, index) + "ay";
}

// Driver code
int main()
{
    string str = pigLatin("graphic");
    if (str == "-1")
        cout << "No vowels found. Pig Latin not possible";
    else
        cout << str;
}
```

Java

```java
// Java program to encode a word to a Pig Latin.
class GFG {
static boolean isVowel(char c) {
    return (c == 'A' || c == 'E' || c == 'I' || c == 'O' || c == 'U' ||
            c == 'a' || c == 'e' || c == 'i' || c == 'o' || c == 'u');
}

static String pigLatin(String s) {

    // the index of the first vowel is stored.
    int len = s.length();
    int index = -1;
    for (int i = 0; i < len; i++)
    {
        if (isVowel(s.charAt(i))) {
        index = i;
        break;
    }
    }

    // Pig Latin is possible only if vowels
    // is present
    if (index == -1)
        return "-1";

    // Take all characters after index (including
    // index). Append all characters which are before
    // index. Finally append "ay"
    return s.substring(index) +
           s.substring(0, index) + "ay";
}

// Driver code
public static void main(String[] args) {
    String str = pigLatin("graphic");
    if (str == "-1")
        System.out.print("No vowels found." +
                         "Pig Latin not possible");

    else
        System.out.print(str);
}
}
// This code is contributed by Anant Agarwal.
```

C#

```c#
// C# program to encode a word to a
// Pig Latin.
using System;
```

```
class GFG {

    static bool isVowel(char c)
    {
        return (c == 'A' || c == 'E' ||
                c == 'I' || c == 'O' ||
                c == 'U' || c == 'a' ||
                c == 'e' || c == 'i' ||
                c == 'o' || c == 'u');
    }

    static string pigLatin(string s)
    {

        // the index of the first
        // vowel is stored.
        int len = s.Length;
        int index = -1;
        for (int i = 0; i < len; i++)
        {
            if (isVowel(s[i]))
            {
                index = i;
                break;
            }
        }

        // Pig Latin is possible only
        // if vowels is present
        if (index == -1)
            return "-1";

        // Take all characters after
        // index (including index).
        // Append all characters which
        // are before index. Finally
        // append "ay"
        return s.Substring(index) +
               s.Substring(0, index)
                           + "ay";
    }

    // Driver code
    public static void Main()
    {
        string str = pigLatin("graphic");

        if (str == "-1")
            Console.WriteLine("No vowels"
                     + "found. Pig Latin"
                      + " not possible");
        else
            Console.WriteLine(str);
```

```
    }
}

// This code is contributed by vt_m.
```

Output :

```
aphicgray
```

This article is contributed by **dewangNautiyal**. If you like GeeksforGeeks and would like to contribute, you can also write an article using contribute.geeksforgeeks.org or mail your article to contribute@geeksforgeeks.org. See your article appearing on the GeeksforGeeks main page and help other Geeks.

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