



# PIG-LATIN TRANSLATOR

Documentation

Jeff Shapiro  
[jeff@shapirohousehold.com](mailto:jeff@shapirohousehold.com)

## Contents

Contents.....	1
Description.....	2
Algorithm .....	3
Check that there is user input.....	3
If the word starts and ends in double quotation marks, then make no change. ....	4
If the word contains and symbol or number, make no changes. ....	4
If the word has a punctuation mark on the end, move the punctuation mark to the end of the new string. ....	4
If the word starts with a vowel, add 'way to the end. ....	4
If the word starts with a constant move the characters before the first vowel. Y is treated as a constant if it is the first letter else it is treated as a vowel.....	5
Test Data .....	8
Test Case .....	8
Screenshot .....	9
Blank translation .....	9
Sample translation .....	10

## Description

Pig Latin is a language game in which words in English are altered. The objective is to conceal the words from others not familiar with the rules. The reference to Latin is a deliberate misnomer, as it is simply a form of jargon, used only for its English connotations as a strange and foreign-sounding language.

This program will make it easy for you to translate any length of text following all the applicable rules.

Features text translation and 5 samples of texts to view.

## Algorithm

```
Imports System.Text

Public Class frmPigLatin
    Private Sub btnClearInputText_Click(sender As Object, e As EventArgs) Handles
        btnClearInputText.Click
            txtWordInput.Clear()
            txtConversionOutput.Clear()
        End Sub

    Private Sub btnConvertText_Click(sender As Object, e As EventArgs) Handles
        btnConvertText.Click

        Check that there is user input
        Dim input As String = txtWordInput.Text
        'Check that there is an input
        If String.IsNullOrEmpty(input) Then
            MsgBox("No valid text has been entered to translate")
            Exit Sub
        End If

        'Split text into array
        Dim words() As String = input.Split(CType(" ", Char()))
        Dim firstCharacter As String
        Dim outputText As New StringBuilder

        For i As Integer = 0 To words.GetUpperBound(0)

            firstCharacter = words(i).First
```

If the word starts and ends in double quotation marks, then make no change.

```

If firstCharacter = "" And words(i).Last = "" Then
    GoTo AppendText
End If

If words(i).Length > 2 Then

    'Determine the casing of each letter for output
    Dim wordCharacters() As Char = words(i).ToCharArray()
    'Dim wordCharacterCasing(wordCharacters.GetUpperBound(0)) As Boolean

```

If the word contains and symbol or number, make no changes.

'check if a symbol or number is within the word. If it is then go to output

```

For Each s In "@#$%^&*1234567890".ToCharArray
    For Each wc In words(i).ToCharArray()
        If s = wc Then
            GoTo AppendText
        End If
    Next
Next

```

If the word has a punctuation mark on the end, move the punctuation mark to the end of the new string.

```

'Check if punctuation is on the end of the word.
Dim punctuationMark As String = words(i).Last
Dim attachedPunctuation As String = Nothing

For Each p In "':, - ! - ( ) . ? ' " ; ".ToCharArray()
    If punctuationMark = p Then
        words(i) = words(i).Remove(words(i).Length - 1) 'remove
        punctuation so it doesn't appear mixed in the word if it is on the end i.e. Hllo
        World,
        attachedPunctuation = p 'set the value of the
        punctuation so it can be reattached later
    End If
Next

```

Select Case firstCharacter

If the word starts with a vowel, add 'way to the end.

```

Case "a", "e", "i", "o", "u",
    "A", "E", "I", "O", "U"
    'If the word starts with a vowel, add 'way' to the end
    words(i) = words(i) & "way" & attachedPunctuation

```

If the word starts with a constant move the characters before the first vowel. Y is treated as a constant if it is the first letter else it is treated as a vowel.

```

        Case "b", "c", "d", "f", "g", "h", "j", "k", "l", "m", "n",
        "p", "q", "r", "s", "t", "v", "w", "x", "y", "z",
        "B", "C", "D", "F", "G", "H", "J", "K", "L", "M", "N",
        "P", "Q", "R", "S", "T", "V", "W", "X", "Y", "Z"

        Dim vowelFirstIndex As Integer = 999

        For Each c In "aeiouy".ToCharArray()
            If words(i).IndexOf(c) <> -1 And words(i).IndexOf(c)
< vowelFirstIndex Then
                vowelFirstIndex = words(i).IndexOf(c)
            End If
        Next

        Dim charactersToMove As String = words(i).Substring(0,
vowelFirstIndex)

        words(i) = words(i).Remove(0, vowelFirstIndex) &
charactersToMove & "ay" & If(attachedPunctuation IsNot Nothing,
attachedPunctuation,
"")
    End Select

End If

```

AppendText:

```

        outputText.Append(words(i) & " ")
    Next

    txtConversionOutput.Text = outputText.ToString

End Sub

Private Sub txtWordInput_KeyDown(sender As Object, e As KeyEventArgs) Handles
txtWordInput.KeyDown
    If e.KeyCode = Keys.Enter Then
        e.SuppressKeyPress = True
    End If
End Sub

Private Sub btnExit_Click(sender As Object, e As EventArgs) Handles btnExit.Click
    Me.Close()
End Sub

'Provide some samples to show trnaslation.
Private Sub cmbSampleSelection_SelectedIndexChanged(sender As Object, e As
EventArgs) Handles cmbSampleSelection.SelectedIndexChanged

    Select Case cmbSampleSelection.SelectedIndex
        Case 0
            txtWordInput.Text = "Doc Bruce Banner, pelted by gamma rays, turned
into the Hulk - ain't he unglamorous! Wreckin' the town with the power of a bull,
Ain't no monster cause who is that lovable? It's ever-lovin' Hulk!...Hulk! Hulk!"

```

Marshall, Will, and Holly on a routine expedition, met the greatest earthquake ever known. High on the rapids, it struck their tiny raft! And plunged them down a thousand feet below... to the Land of the Lost! Lost! Lost! Lost! Lost!

This is it, this is it. This is life, the one you get, so go and have a ball. This is it, this is it. Straight ahead, and rest assured you can't be sure at all. So while you're here enjoy the view, keep on doing what you do, so hold on tight we'll muddle through one day at a time, one day at a time. So up on your feet, up on your feet - somewhere there's music playing. Don't you worry none, we'll just take it like it comes, one day at a time, one day at a time.

"

#### Case 1

```
txtWordInput.Text = "Yogi Bear is smarter than the average bear, Yogi Bear is always in the ranger's hair. At a picnic table you will find him there, stuffing down more goodies than the average bear. He will sleep till noon but before it's dark, he'll have every picnic basket that's in Jellystone Park. Yogi has it better than a millionaire. That's because he's smarter than the average bear!"
```

My name is Rhoda Morgenstern. I was born in the Bronx, New York in December of 1941. I've always felt responsible for World War II. The first thing I remember liking that liked me back was food. I had a bad puberty; it lasted seventeen years. I'm a high school graduate. I went to art school. My entrance exam was on a book of matches. I decided to move out of the house when I was twenty-four. My mother still refers to this as the time I ran away from home. Eventually, I ran to Minneapolis, where it's cold and I figured I'd keep better. Now I'm back in Manhattan. New York, this is your last chance!

There were six people who loved to watch television, but they didn't like what they saw. Armed with determination and a strong will to change the course of television, they wrote their own shows, but that wasn't enough, they had to sell them. They went straight to the networks, but the networks were not ready for them. But did that stop them? No. They built their own network and they liked what they saw.

"

#### Case 2

```
txtWordInput.Text = "In an age when nature and magic rule the world, there is an extraordinary legend: the story of a warrior who communicates with animals, who fights sorcery and the unnatural. His name is Dar, last of his tribe. He is also called Beastmaster."
```

Tell me why, I love you like I do. Tell me who, could stop my heart as much as you. Let's take each other's hand, as we jump into the final frontier. Mad about you baby, yeah, I'm mad about you. Whoo hoo hoo.

Overture, curtains, lights. This is it, the night of nights. No more rehearsing and nursing a part, we know every part by heart! Overture, curtains, lights. This is it, you'll hit the heights. And oh, what heights we'll hit. On with the show this is it. Tonight what heights we'll hit, on with the show this is it!

"

#### Case 3

```
txtWordInput.Text = "Now, the world don't move to the beat of just one drum, what might be right for you, may not be right for some. A man is born, he's a man of means. Then along come two, they got nothing but their jeans. But they got, Diff'rent Strokes, it takes Diff'rent Strokes. It takes Diff'rent Strokes to move the world."
```

Boy the way Glen Miller played, songs that made the hit parade. Guys like us we had it made, those were the days. And you knew who you were then, girls were girls and men were men. Mister, we could use a man like Herbert Hoover again. Didn't need no welfare

state, everybody pulled his weight. Gee our old LaSalle ran great. Those were the days.

They arrived in fifty mother ships, offering their friendship and advance technology to Earth. Skeptical of the visitors, Mike Donovan and Juliet Parrish infiltrated their ranks and soon discovered some startling secrets. The resistance is all that stands between us... and the visitors.

"

#### Case 4

```
txtWordInput.Text = "Dr. David Banner: physician; scientist. Searching  
for a way to tap into the hidden strengths that all humans have... then an accidental  
overdose of gamma radiation alters his body chemistry. And now when David Banner grows  
angry or outraged, a startling metamorphosis occurs. The creature is driven by rage  
and pursued by an investigative reporter. The creature is wanted for a murder he  
didn't commit. David Banner is believed to be dead, and he must let the world think  
that he is dead, until he can find a way to control the raging spirit that dwells  
within him.
```

There are those who believe that life here began out there... far across the universe, with tribes of humans who may have been the forefathers of the Egyptians or the Toltecs or the Mayans. Some believe that there may yet be brothers of man who even now fight to survive somewhere beyond the heavens. Fleeing from the Cylon Tyranny, the last Battlestar - Galactica - leads a rag-tag fugitive fleet on a lonely quest. A shining planet, known as Earth.

Baby if you've ever wondered, wondered what ever became of me. I'm living on the air in Cincinnati, Cincinnati WKRP. Got time and tired of packing and unpacking. Town to town, up and down the dial. Maybe you and me were never meant to be, But baby think of me once in a while. I'm in WKRP in Cincinnati.

"

End Select

End Sub

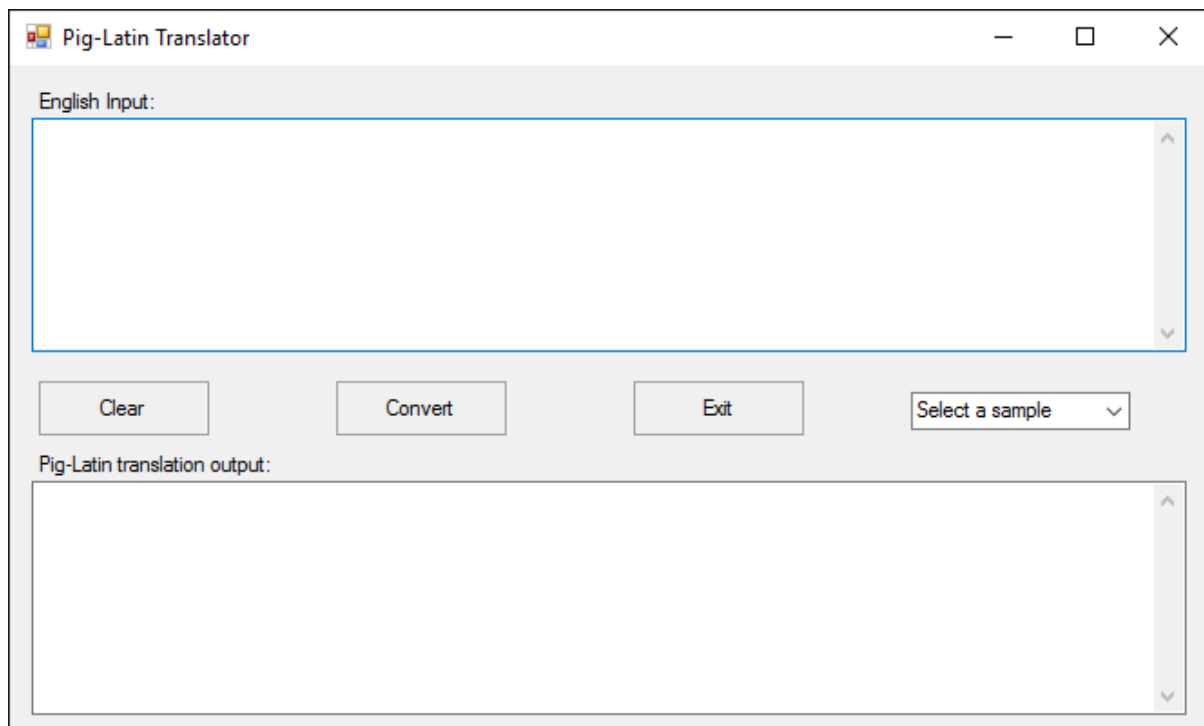
End Class



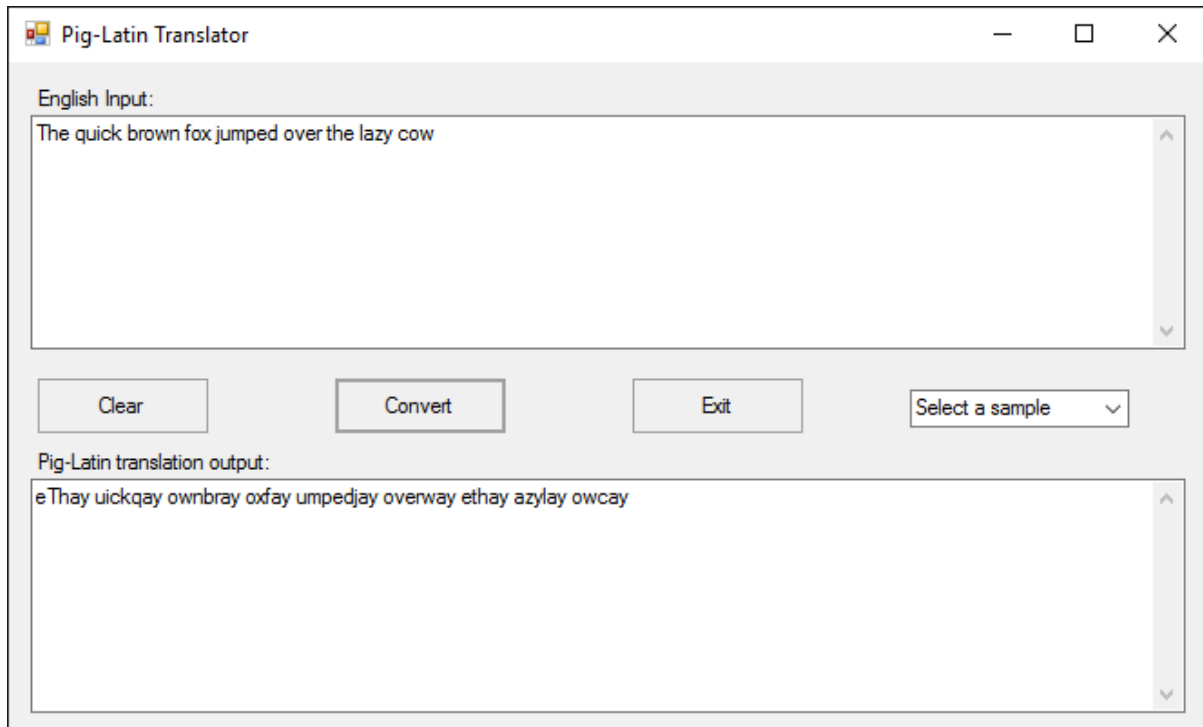
## Test Data

	Test Case	Input	Expected Outcomes	Actual Outcomes
1	<i>Word Starting with uppercase vowel</i>	Apple	Appleway	Appleway
2	<i>Word Starting with lowercase vowel</i>	apple	appleway	appleway
3	<i>Word with symbol</i>	<a href="mailto:cale@markemehigh.com">cale@markemehigh.com</a>	<a href="mailto:cale@markemehigh.com">cale@markemehigh.com</a>	<a href="mailto:cale@markemehigh.com">cale@markemehigh.com</a>
4	<i>Word Starting with uppercase constand</i>	Banana	ananaBay	ananaBay
5	<i>Word Starting with lowercase constant</i>	banana	ananabay	ananabay
6	<i>Word with punctuation mark on the end</i>	Jeff is amazing!	effJay is amazingway!	effJay is amazingway!
7	<i>Word wrapped in double quotation makrs</i>	"Hello"	"Hello"	"Hello"
8	<i>Word starting with Y</i>	Yellow	ellowYay	ellowYay
9	<i>Word contains y after first letter but before vowels</i>	Dying	yingDay	yingDay

## Screenshot



Blank translation



The screenshot shows a window titled "Pig-Latin Translator". It has a standard Windows-style title bar with minimize, maximize, and close buttons. The window is divided into two main sections. The top section is labeled "English Input:" and contains a text area with the text "The quick brown fox jumped over the lazy cow". Below this text area are four buttons: "Clear", "Convert", "Exit", and "Select a sample" (which is a dropdown menu). The bottom section is labeled "Pig-Latin translation output:" and contains a text area with the translated text "eThay uickqay ownbray oxfay umpedjay overway ethay azylay owcay".

Sample translation