Skill-check HW #3 | English loanwords in Hawai'ian

For this assignment, your goal is to demonstrate your understanding of:

- how to determine the syllable structure of a language from a data set
- how to apply the tools of our formal model to analyze that syllable structure

The data set below shows words of Hawai'ian (a Polynesian language spoken in Hawai'i) that have been borrowed from English. Vowels that have been inserted by a process of **epenthesis** (insertion) are shown in **bold underline**.

Some notes:

- Several English consonants have been turned into different consonants in the Hawai'ian forms. You are not responsible for discussing or explaining this.
- For any English segments that appear to have been deleted, assume that these were simply not heard by Hawai'ian speakers. That is, any apparent "deletion" here is not a phonological rule, but an adjustment that took place in speech perception.

English source	Hawai'ian	English source	Hawai'ian
ticket	[kikik i]	rice	[laik <u>i</u>]
soap	[kop <u>a</u>]	bell	[pel <u>e</u>]
beer	[pia]	zodiac	[kokiak a]
wharf	[uap o] (ignore [w→u])	thousand	[kaukan <u>i</u>]
brush	[p a lak <u>i</u>]	golf	[kol <u>e</u> p <u>a</u>]
story	[kole]	wine	[wain <u>a</u>]
palm	[paam <u>a</u>]	blue	[p o luu]
school	[kol <u>a</u>]	soup	[kup a]
brown	[p <u>a</u> laun <u>u</u>]	Christmas	[k <u>a</u> lik <u>i</u> mak <u>a</u>]
cream	[k <u>a</u> lim <u>a</u>]	Gregg	[k e lek <u>i</u>]
William	[wiliam a]	Katherine	[kakalin a]
Winifred	[winip e lek e]		

- (1) Using the "syllable structure options" checklist as summarized in section 5 of the handout "Syllables: Overview / Describing syllabification options", use the evidence from these loanwords to state what the options are in Hawai'ian for legal **onsets** and legal **codas**. (For nuclei: only vowels are legal nuclei; diphthongs are not legal.)
- (2) Show the **outcome** of the **first** application of the **syllable-building rules** (see handout "<u>Syllable-building rules</u>") to the **URs** for the words meaning 'brush' and 'golf'. *Note:* Consider the URs of the Hawai'ian words to be the same as the surface forms, except without the epenthetic vowels.
- (3) Propose an **epenthesis rule** for Hawai'ian, with a rule environment that correctly predicts all the epenthetic vowels in the data set. (Write the "change" element of the rule simply as "V", because we are not addressing *which* vowels are inserted.)