

**Look Who's Talking**

**Problem Description**

In English when we say "we go", it could mean one of a variety of things, for example:

- You and I go
- He/She and I go
- You (two or more) and I go
- They and I go

In Māori, this is not the case as the pronouns (the 'we' part in the example above) tell us who's involved (the subject of the sentence). The table below shows this:

	Includes both speaker and listener	Excludes the listener(s)	Excludes the speaker	Neither speaker nor listener(s)
One person		<b>au/ahau</b> I, me	<b>koe</b> you	<b>ia</b> he, she, him, her
Two people	<b>tāua</b> we, us, you, and I	<b>māua</b> we, us, but not you	<b>kōrua</b> you two	<b>rāua</b> they, them
Three or more people	<b>tātou</b> we, us, including you	<b>mātou</b> we, us, but not you	<b>koutou</b> you	<b>rātou</b> they, them

On top of this we have to worry about the tense – when the thing happens. For example, past completed – *I went*, present – *I go*, and future – *I will go*. In Māori, this is determined by a 'marker':

	Sentence Starter	Example
Past	<b>I</b>	<b>I haere au</b> I went
Present	<b>Kei te</b>	<b>Kei te haere au</b> I go
Future	<b>Ka</b>	<b>Ka haere au</b> I will go

**Task**

Write a program that takes an English sentence (e.g. 'We (3 excl) go') and translate it into Māori (e.g., 'Kei te haere mātou').

For example these lines of input:

```
We (3 excl) are going
I am going
They (2 excl) are reading
You (2 incl) are reading
I went
I will go
gibberish
We are coming
```

should produce output like:

```
Kei te haere mātou
Kei te haere au
Kei te pānui rāua
Kei te pānui kōrua
I haere au
Ka haere au
invalid sentence
unknown verb "coming"
```

**Notes:**

1. Māori places a sentence starter then the verb followed by the subject then the object, where as English is subject-verb-object.
2. Māori doesn't change the verbs to indicated tense unlike English, the sentence starter does.
3. Māori doesn't change the verbs to indicated who's talking unlike English.
4. We will only be using the verbs below:

**haere** - to go

**hanga** - to make

**kite** - to see

**hiahia** - to want

**karanga** - to call

**pātai** - to ask

**pānui** - to read

**ako** - to learn

**Relates to Objectives**

1.1, 1.2, 1.3, 2.2, 2.6, 2.7, 2.8, 3.5, 4.1, 4.2, 4.6

(2 point, Pair)