Module 12: Self Test

In Python, strings are immutable. For example, is a string is “Hello Ahmedabad”, then we cannot change it to German by saying astring[1] = “a” in order to obtain “Hallo Ahmedabad”. As I argued, this is actually a smart policy. In order to change strings, we can move them to lists and then modify the list. Finally, using the `"".join` construct, we change the list back into a string.

```python
def example():
    astring = "Hello Ahmedabad"
    lista = list(astring)
    lista[1]='a'
    return "".join(lista)
```

In line 3, we take the string and make it into a list, in line 4, we change the list, and in line 5, we change the changed list back into a string. Often, it is more convenient to leave out the first step and start with an empty list. We then use a for loop to walk through the string and append to a result list. Finally, we convert the result list into a string, which is then the return value.

1. Write a function that takes a string and replaces all instances of ‘a’, ‘e’, ‘i’, ‘o’ or ‘u’ with ‘?’
   ```python
   fun1("Hello Dolly")
   'H?ll? D?lly'
   ```

2. Write a function that replaces all instances of “a” in a string with “ajaja”.
   ```python
   fun2("Ahmedabad")  -> 'Ahmedajabajajad'
   ```