

Module 12: Self Test

In Python, strings are immutable. For example, if 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.

```
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 ‘?’
`fun1("Hello Dolly")`
`'H?ll? D?lly'`
2. Write a function that replaces all instances of “a” in a string with “ajaja”.
`fun2("Ahmedabad")` → `'Ahmedajajabajajad'`