Module 11 — Lists: Selftests

1. To make a list, we use the key-word list. Make a list of all the letters in “Ahmedabad”.

2. To sort a list, we can use either the method sort or the function Sorted. Create a list of letters in “Ahmedabad” that is sorted.
3. For each letter in the word “Ahmedabad”, print out the letter followed by “j”, followed by the letter.
4. There are many tricks in order to remove duplicate elements in a list. One common way is to use the Python-set, but we do not know that yet. Here, we write a function that uses the “in” predicate. This predicate checks whether an object is in a list. We write a function remove_duplicates with one parameter lista, denoting a list. Inside the function, we create a new list that is initially empty. We then go through all elements in the list, using a for loop. For each element, we ask whether it is already in the new list. If it isn’t, then we append to it. Write the code.

Solutions

(1)
```
list("Ahmedabad")
```

(2)
```
lista = list("Ahmedabad")
lista.sort()
print(lista)
```

(2)
```
lista = sorted(list("Ahmedabad"))
print(lista)
```

(3)
```
for letter in sorted(list("Ahmedabad")):
    print(letter + "j" + letter)
```

(4)
```
def remove_duplicates(lista):
    new_lista = []
    for element in lista:
        if element not in new_lista:
            new_lista.append(element)
    return new_lista
```