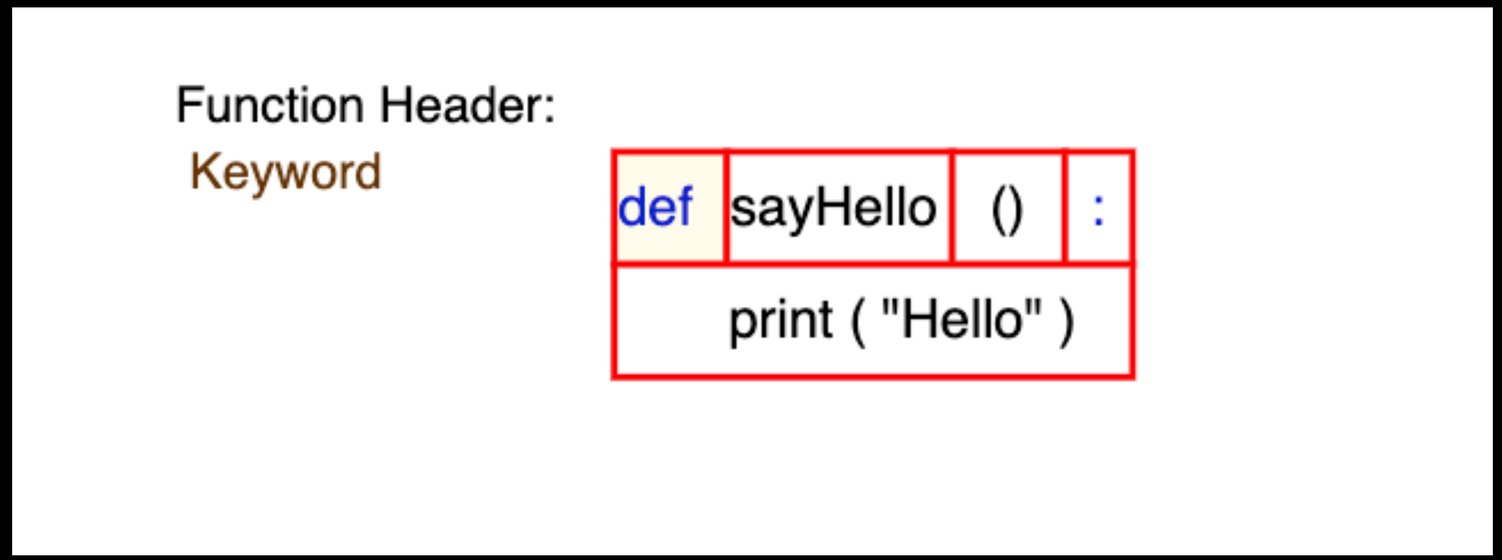
Funciones

Python

Joe | 2024

Funciones

- Hemos estado funciones como print(), input(), range(), len(), etc.

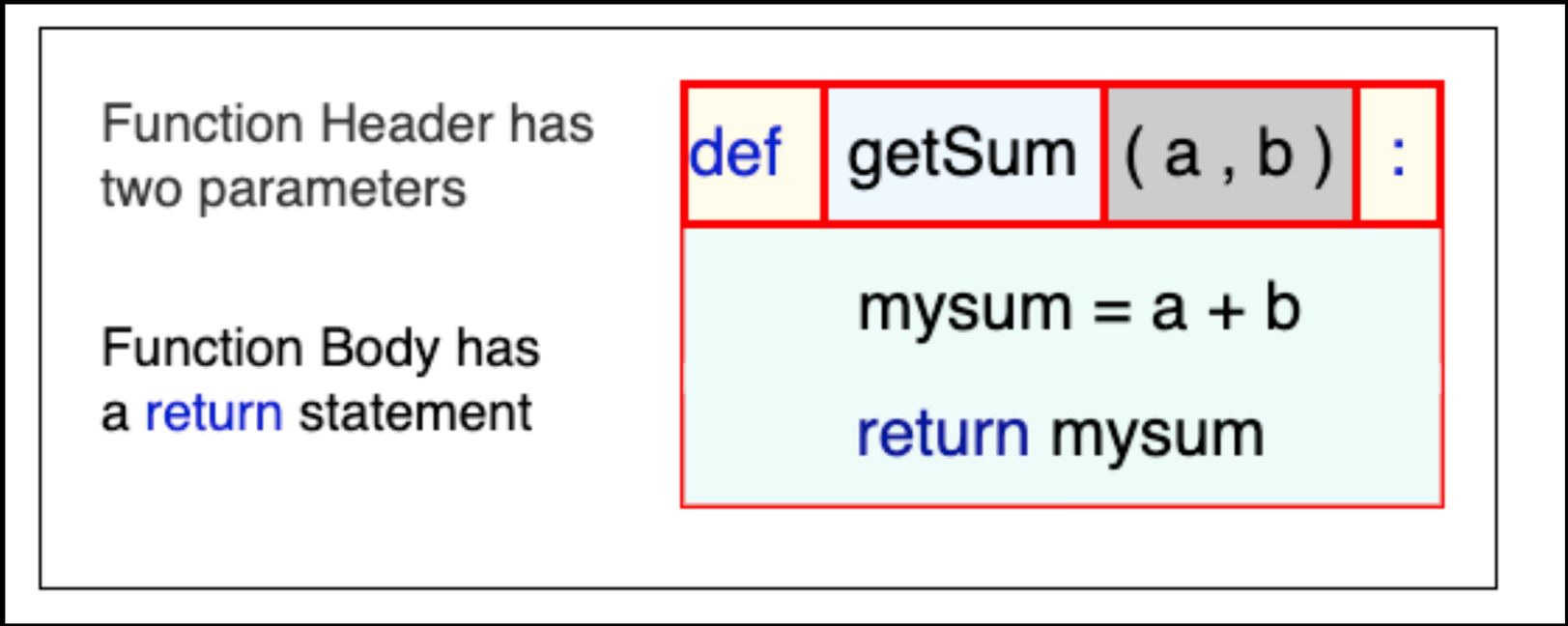


El nombre de la función puede tener letras [A-Z][a-z] e incluido el “_”. También puede tener dígitos [0-9], pero, el nombre de la función

No puede comenzar con número.

La sentencia de retorno

- Esta función retorna un valor. Para eso usamos la palabra return.



Funciones que python nos brinda

divmod()

```python
print(13%3)
print(divmod(13, 3))


q, r = divmod(13, 3)
print("Cociente:", q)
print("Residuo:", r)
```

reversed()

ase6 > reversed.py > ...

```
1  for a in reversed([1,2,3,4,5]):
2      print(a)
3
4  for b in reversed("neib"):
5      print(b)
```

round()

Utiliza un redondeo así: lo que significa que los números que son exactamente la mitad (que terminan en .5) se redondean al número par más cercano.

round.py > ...

```
1  print('value\tfloor\tceiling\teven-rounded:')
2
3  for tentimes in range(30, 47):
4      c = tentimes/10
5      print(c, '\t', round(c-0.49), '\t', round(c+0.49), '\t', round(c))
6
7
8  print(round(5.5))
```

hex() y bin()

radix.py > ...

```python
sourceNum = int(input("Ingrese un número en decimal: "))
targetRadix = int(input("Ingrese la base a convertir 2 o 16: "))

if (targetRadix==2):
    print(bin(sourceNum))
else:
    if(targetRadix==16):
        print(hex(sourceNum))
    else:
        print("Base no soportada")
```

sorting()

lase6 > sorting.py > ...

```python
nums = [4, 2, 5, 4]
print("Original: ", nums)
print("Sorted: ", sorted(nums))

alphs = 'zigZAG'
print("Original: ", alphs)
print("Sorted: ", sorted(alphs))
```

Funciones para manejar Strings

Nota: Todas retornan un nuevo string sin cambiar el original

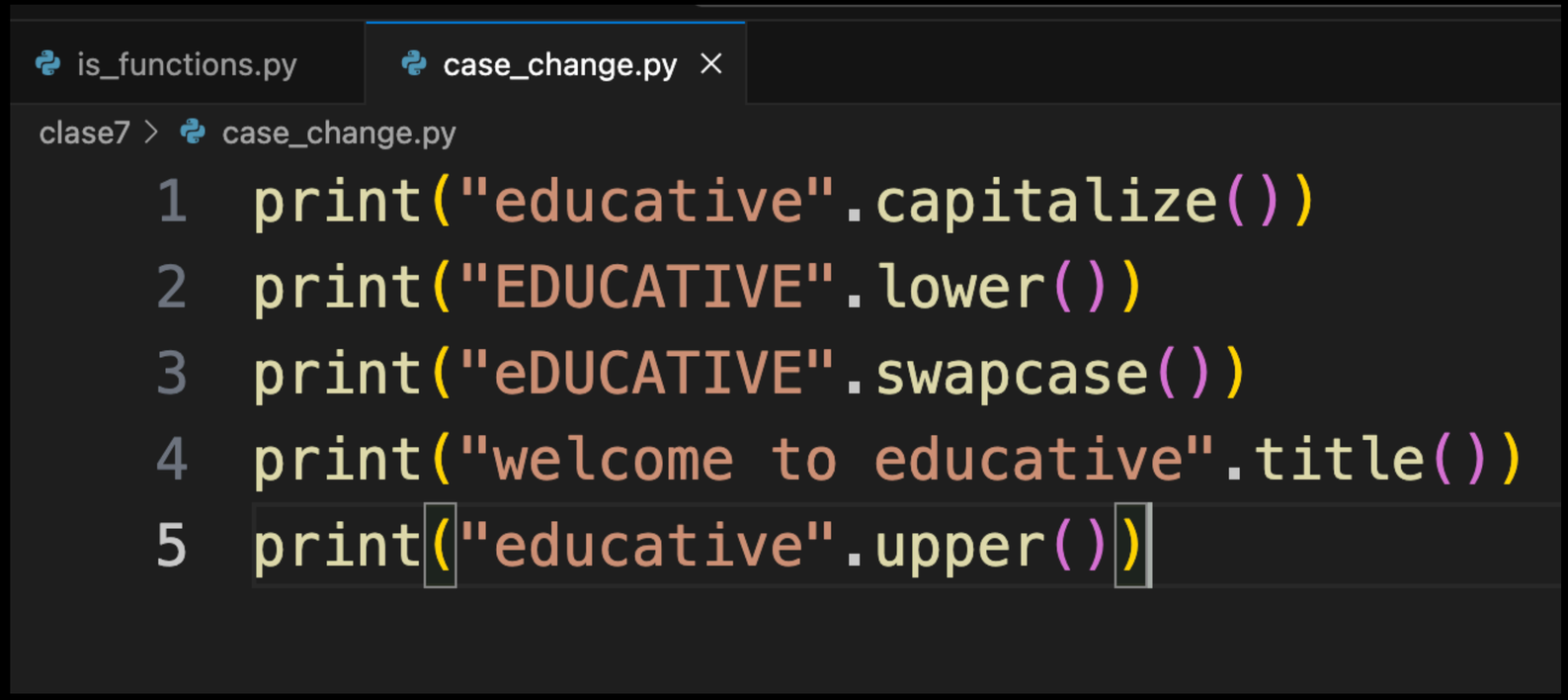
Is...

is_functions.py

clase7 > is_functions.py

```
1  print("a5".isalnum())
2  print("abc".isalpha())
3  print("5".isdigit())
4  print("abc".islower())
5  print("\t".isspace())
6  print("Welcome to Educative".istitle())
7  print("EDUCATIVE".isupper())
```

Funciones relacionadas al cambio de case



Funciones para buscar ocurrencias en String

is_functions.py | case_change.py | ocurrencias.py

clase7 > ocurrencias.py

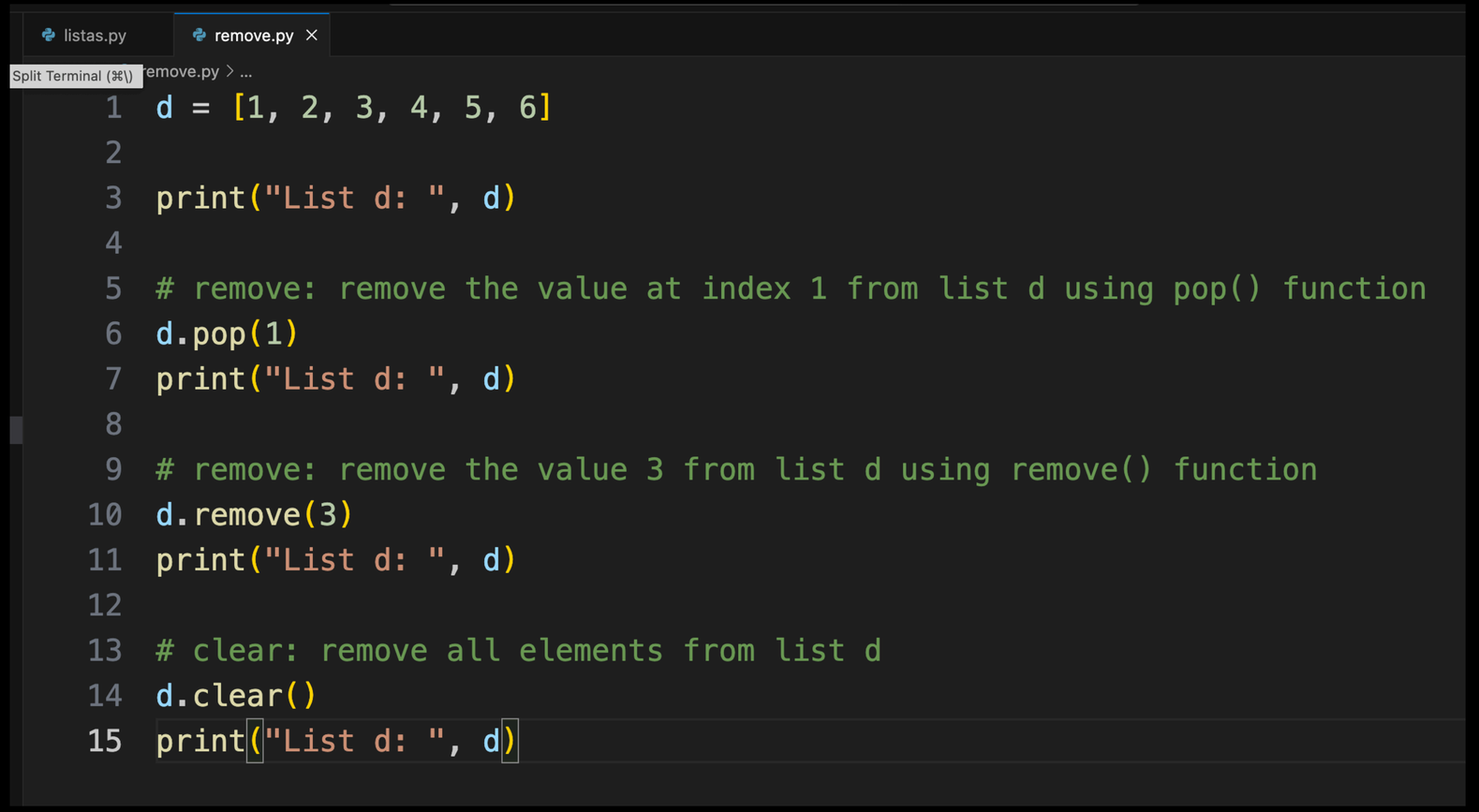
```
1  print("educative".endswith('ve'))
2  print("educative".find('e'))
3  print("educative".rfind('e'))
4  print("educative".count('e'))
5  print("educative".replace('e','..E..'))
6  print("educative".startswith('edu'))
7
```

Funciones para Listas

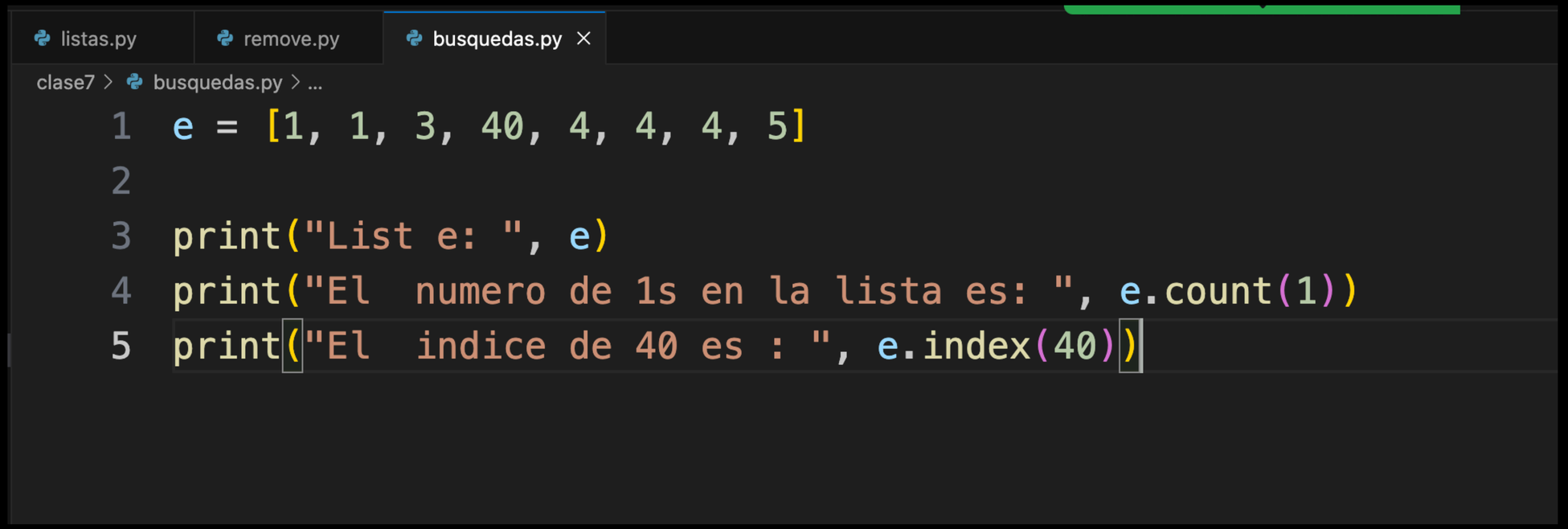
```
a = [1,2,3]
b = [8,9]
print("List a:",a)
print("List b:",b)

print("\nAppending 4 in list a")
a.append(4) # Appending 4 in list a
print("List a:",a)

print("\nAppending complete list b as sublist in a ")
a.append(b) # Appending complete list b as sublist in a
print("List a:",a)
print("List b:",b)

print("\nCreating a new copy of list b in list c")
c = b.copy() # Creating a new copy of list b in list c
print("List b:",b)
print("List c:",c)
```

```
print("\n Referencing: list d is an other name of list b")
d = b # Referencing: list d is an other name of list b
print("List d:",d)

print("\n Appends all members of b to list c")
c.extend(b) # Appends all members of b to list c
print("List c:",c)

print ("\nInserting 15 at index 1 in list b")
b.insert(1,15)# Inserting 15 at index 1 in list b
print("List b:",b)
print("List d:",d)
```

Funciones para remover valores de listas



Funciones relacionadas a búsquedas



Funciones relacionadas al orden