

# LENGUAJES y HERRAMIENTA PARA CIENCIAS DE DATOS I

## Funciones Orden Superior (Reduce - Sorted)



# Funcion reduce

- Paquete functools

```
reduce(funcion, iterable, [inicializador])
```

```
>>> from functools import reduce
>>> reduce(lambda x, y: x+y, [1, 2, 3, 4, 5])
15
>>> reduce(lambda x, y: x+y, [])
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
TypeError: reduce() of empty sequence with no initial value
>>> reduce(lambda x, y: x+y, [],0)
0
>>> 
```

# Función sorted

- Librería estándar de Python

```
sorted(iterable, *, key=None, reverse=False)
```

```
>>> a = ['hola', 'adios', 'tu']
>>> sorted(a)
['adios', 'hola', 'tu']
>>> sorted(a, key=len)
['tu', 'hola', 'adios']
>>> sorted(a, key=len, reverse=True)
['adios', 'hola', 'tu']
>>>
```

