



PYTHON

**Errores, Listas
y Funciones**



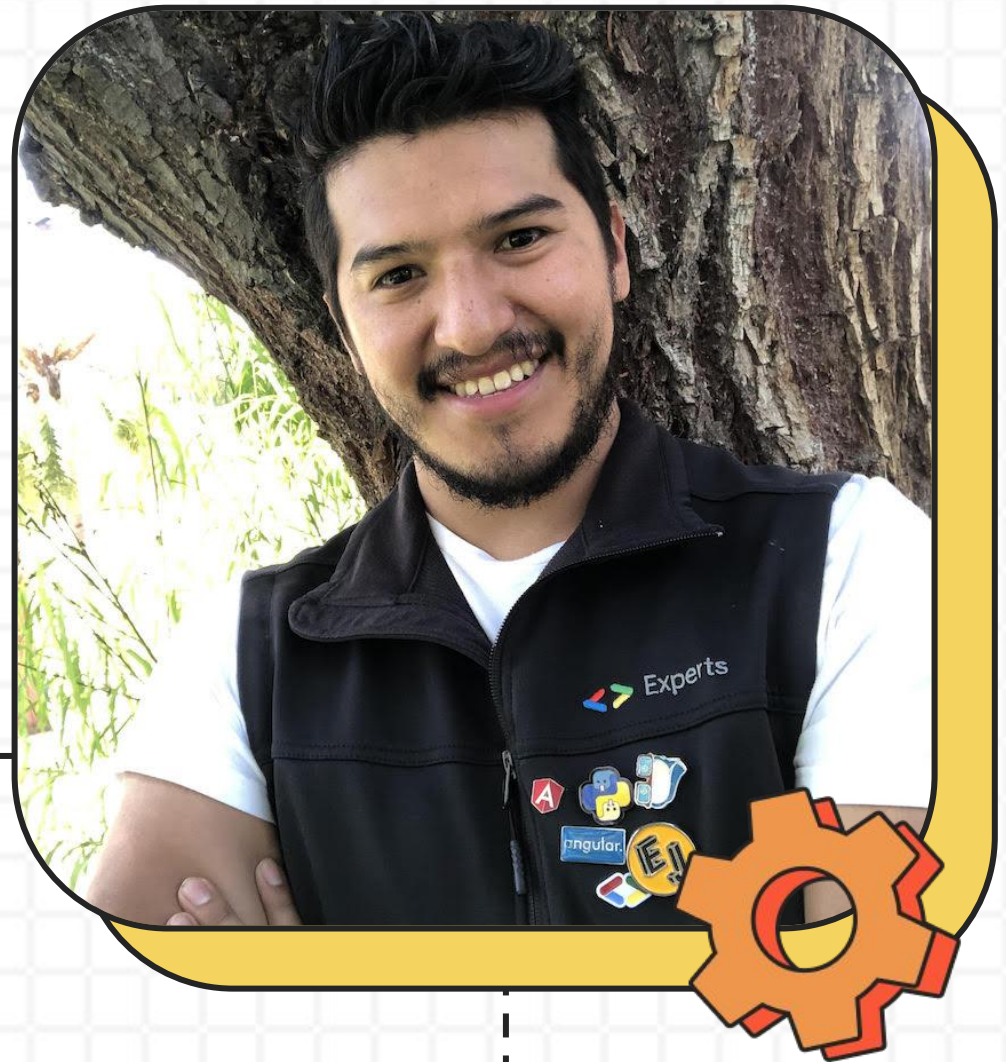
by @nicobytes



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@nicobytes

- Colombian living in Bolivia
- Senior Software Developer with +8 Years





Microsoft®
Most Valuable
Professional



01

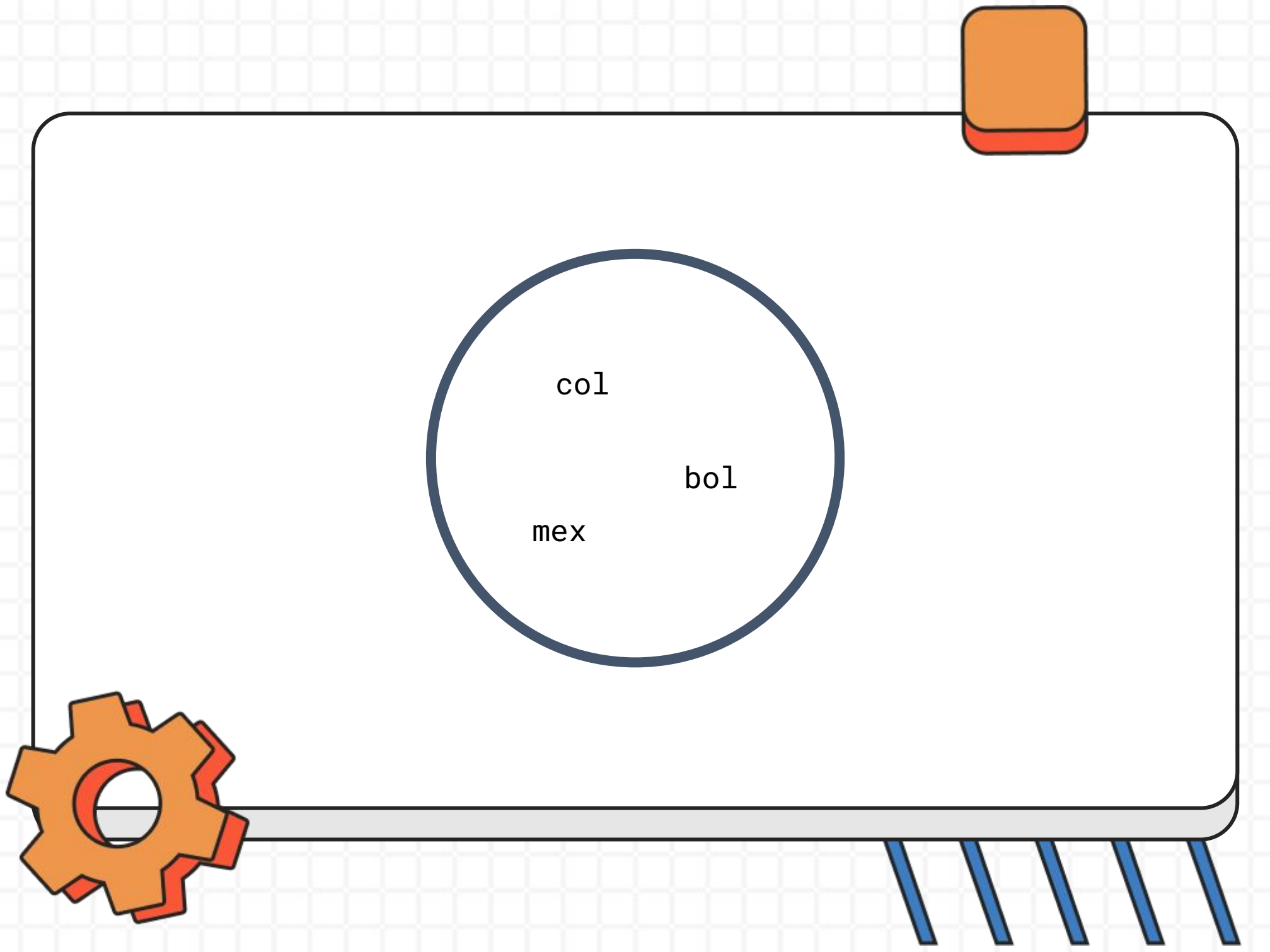
El Zen de Python



02

Conjuntos

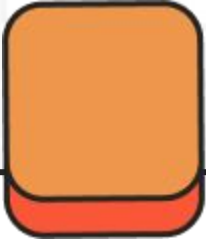

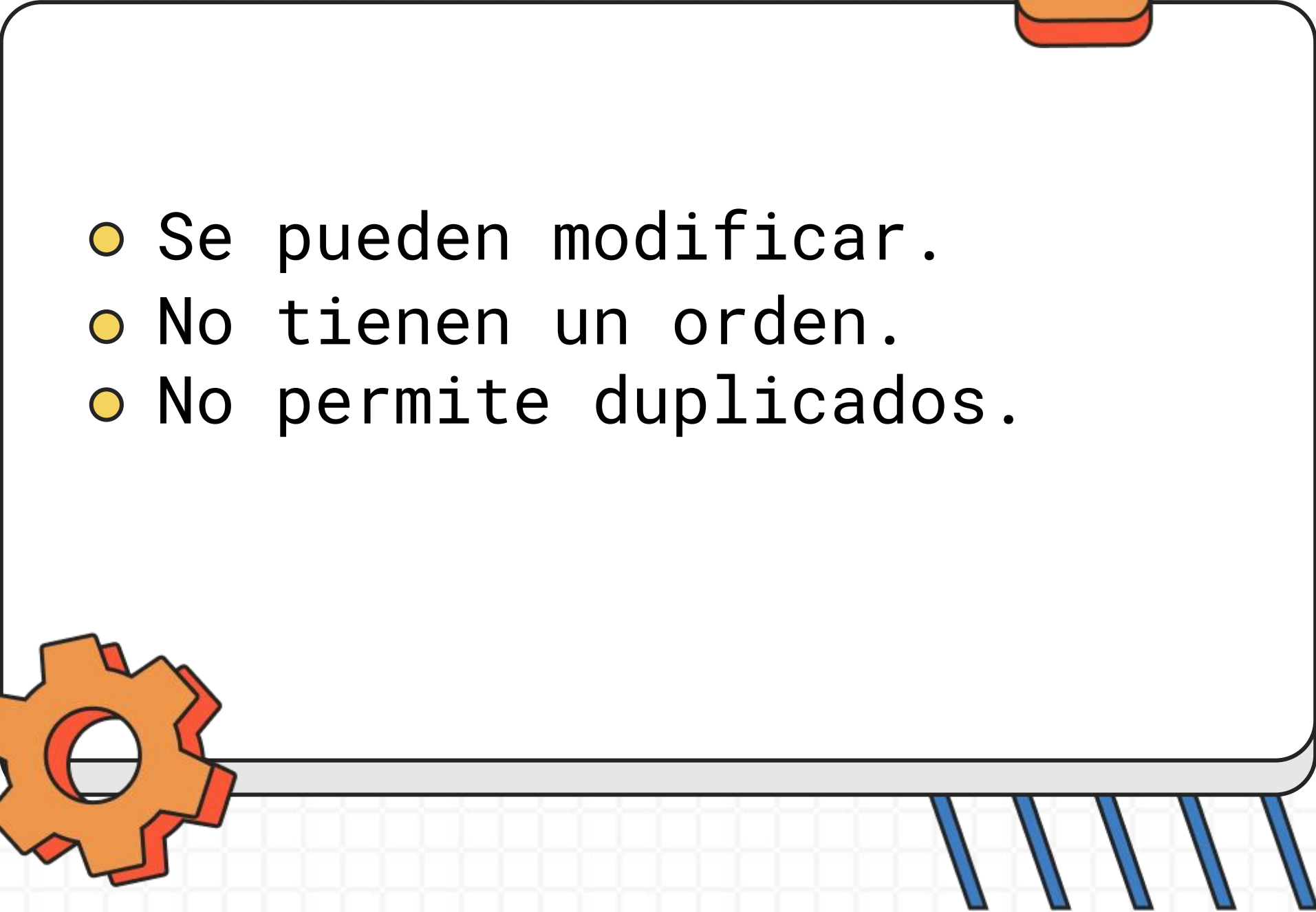




col

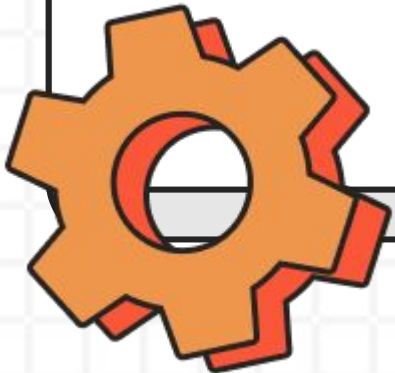
bol

mex

- 
- Se pueden modificar.
 - No tienen un orden.
 - No permite duplicados.
- 
- 

03

Modificando conjuntos

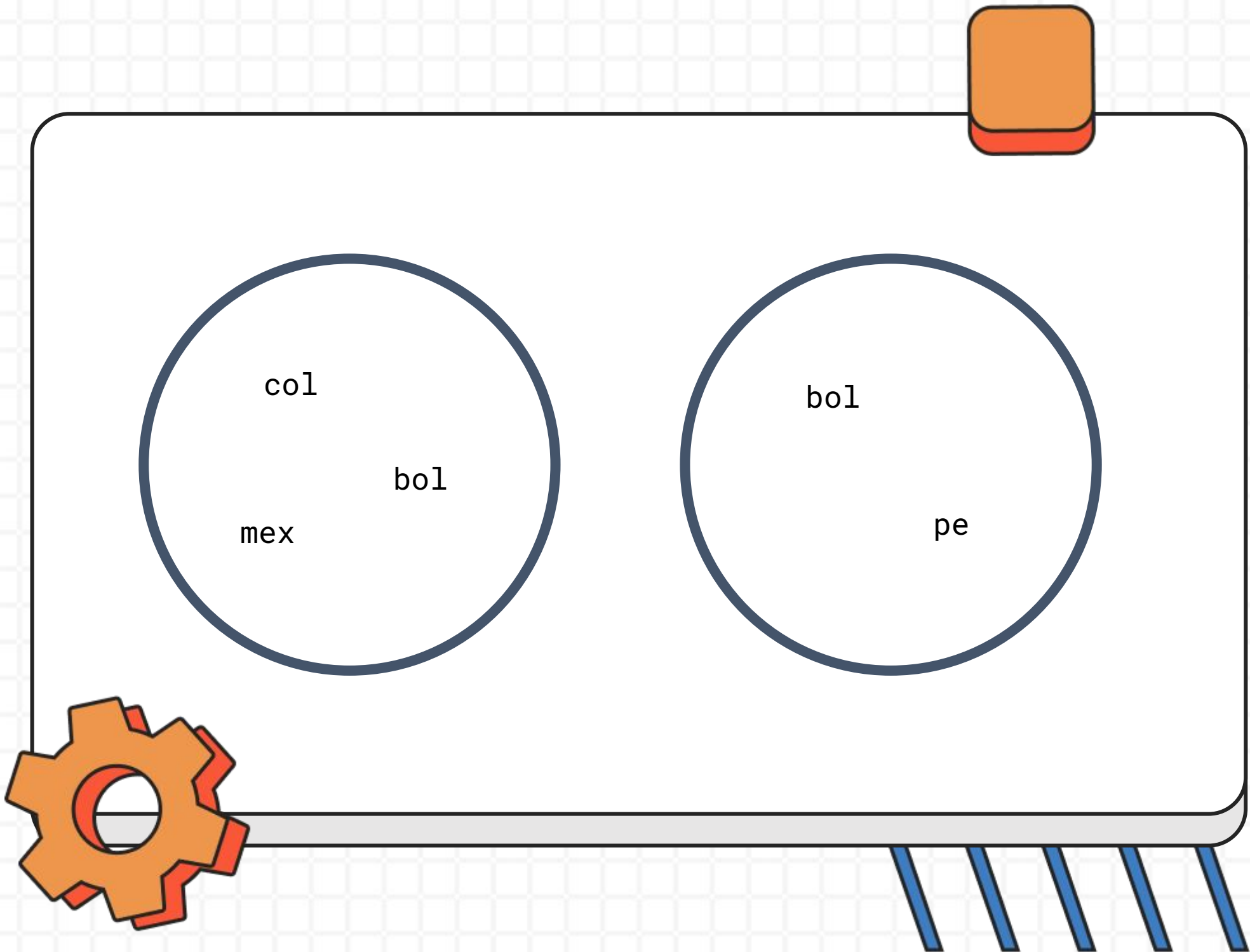


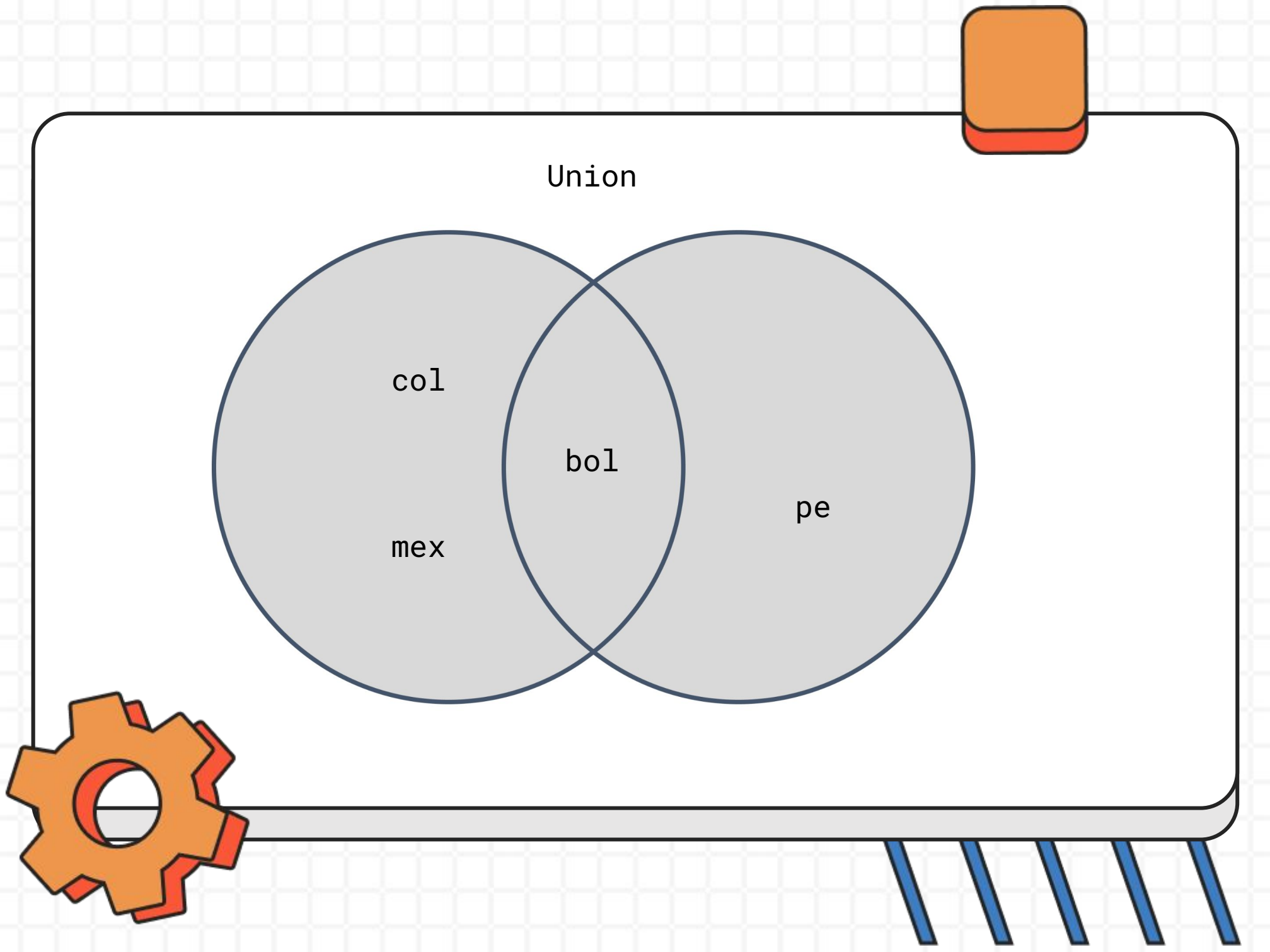


04

Operaciones con conjuntos







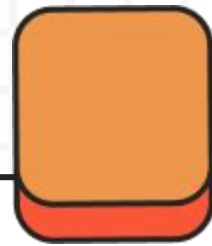
Intersection

col

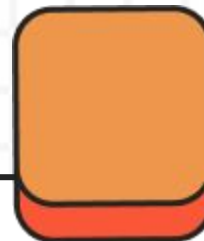
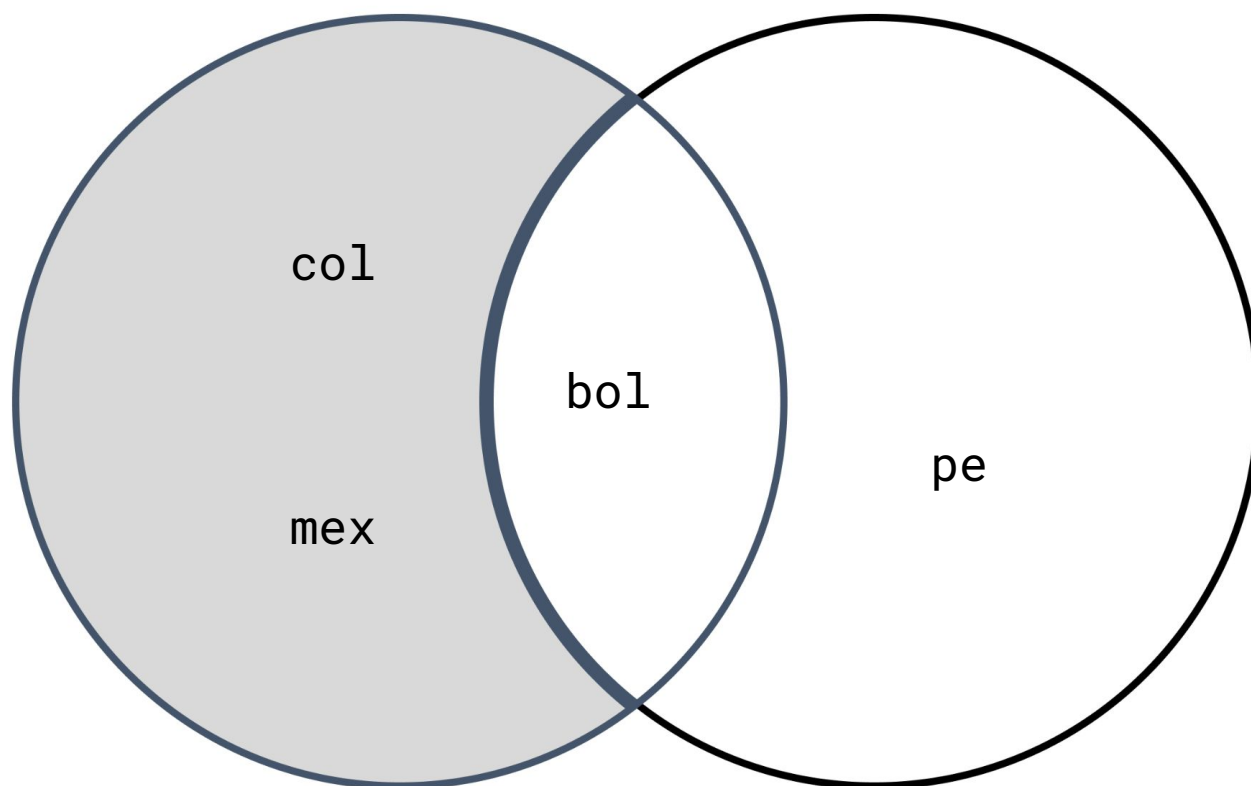
bol

pe

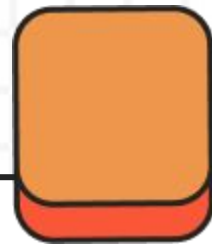
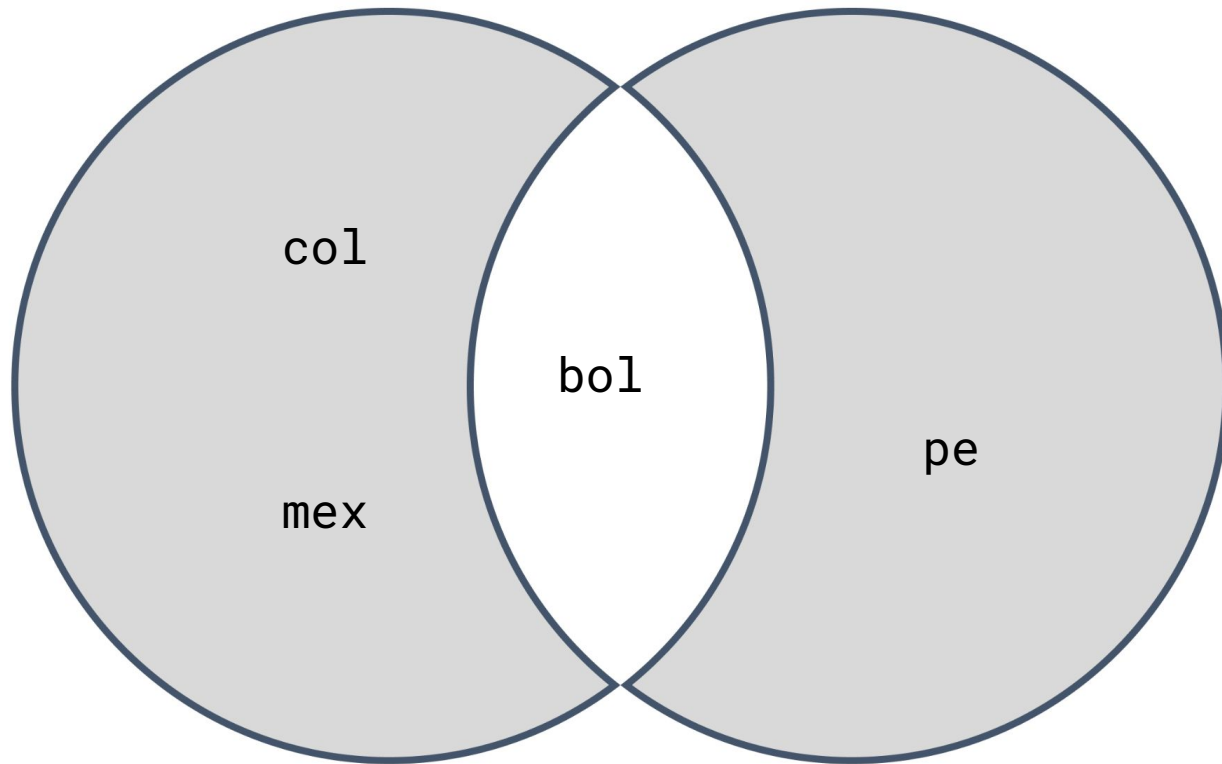
mex



Difference



Symmetric Difference



05

List Comprehension





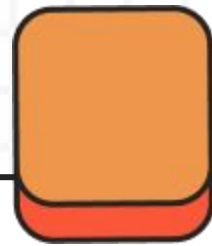
```
[element for element in iterable]
```



Elemento

Ciclo donde se extraen elementos
de cualquier iterable





```
[element for element in iterable if condition]
```



Elemento

Ciclo donde se extraen elementos
de cualquier iterable

Condición
opcional para
filtrar elementos





```
[i*2 for i in range(1, 101) if i % 2 == 0]
```



Elemento Ciclo donde se extraen elementos
de cualquier iterable

Condición
opcional para
filtrar elementos



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Dictionary Comprehension





```
{key:value for var in iterable}
```



Elemento
llave-valor

Ciclo donde se extraen elementos
de cualquier iterable



07

Dictionary Comprehension





```
{key:value for var in iterable if condition}
```

Elemento
llave-valor

Ciclo donde se extraen
elementos de cualquier
iterable













Condición
opcional para
filtrar elementos



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Lists vs. Tuples vs. Set



	Mutable	Ordenada	Indexing/ licing	Duplicar elementos
<i>List</i>				
<i>Tuple</i>				
<i>Set</i>				

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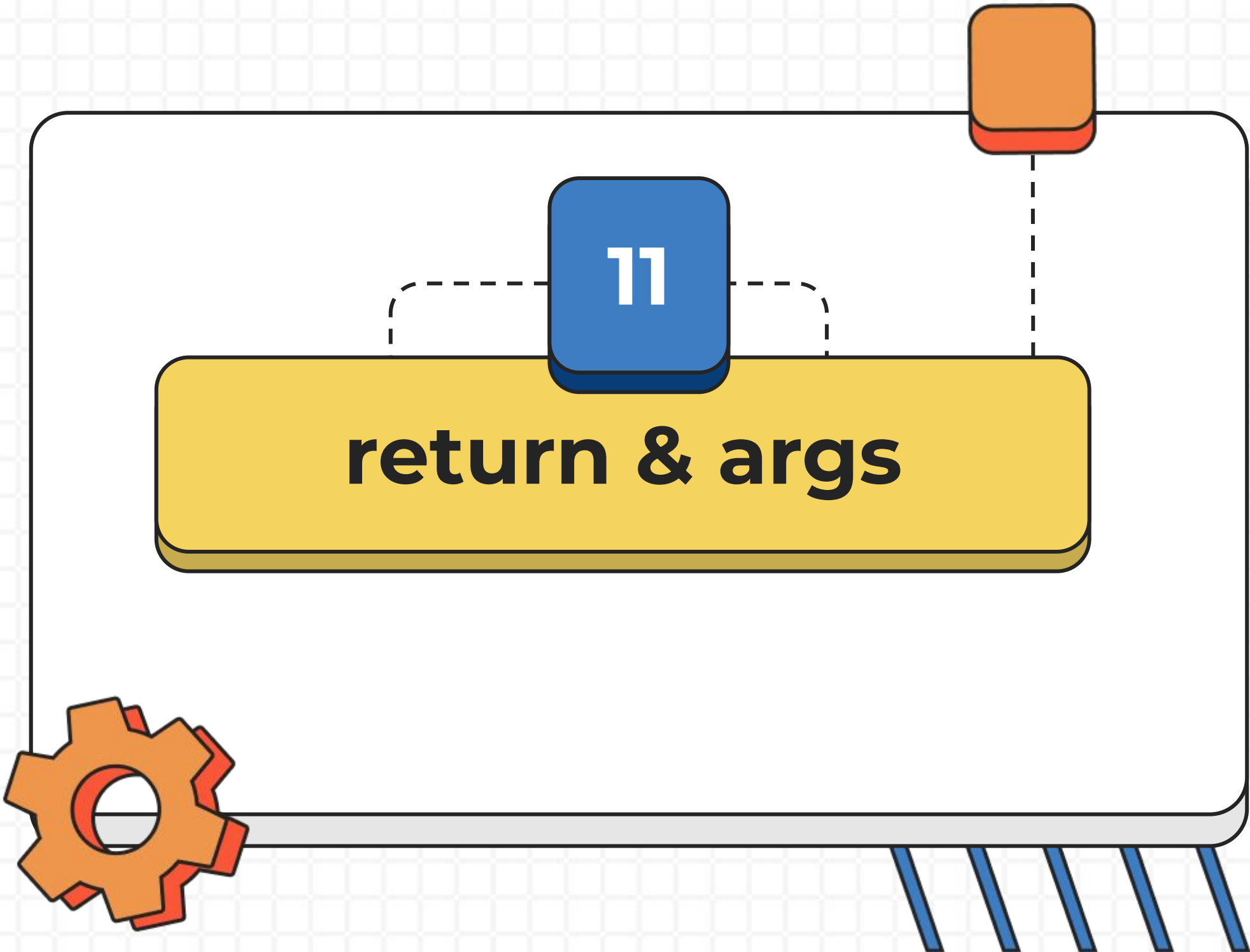
Funciones

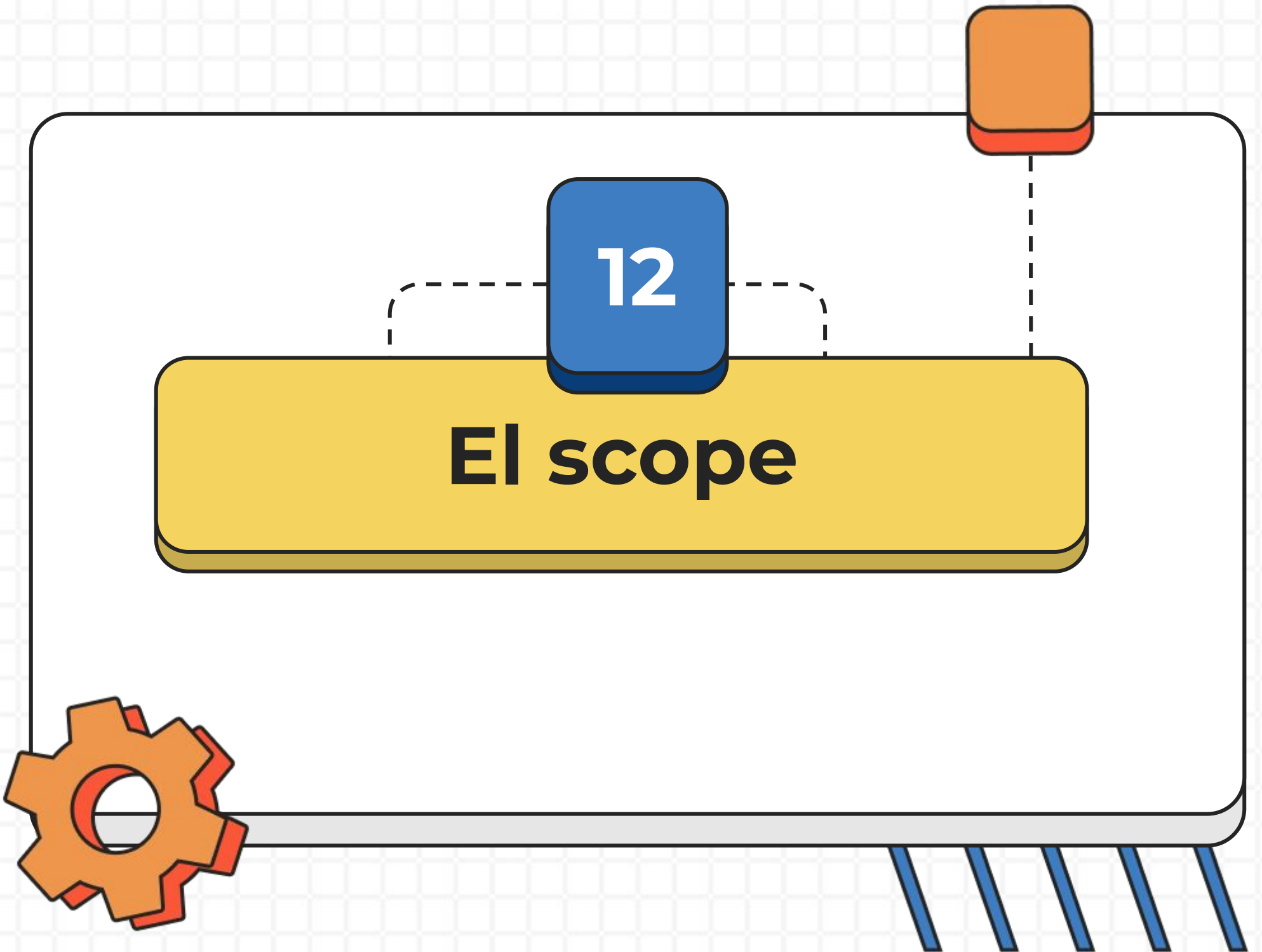


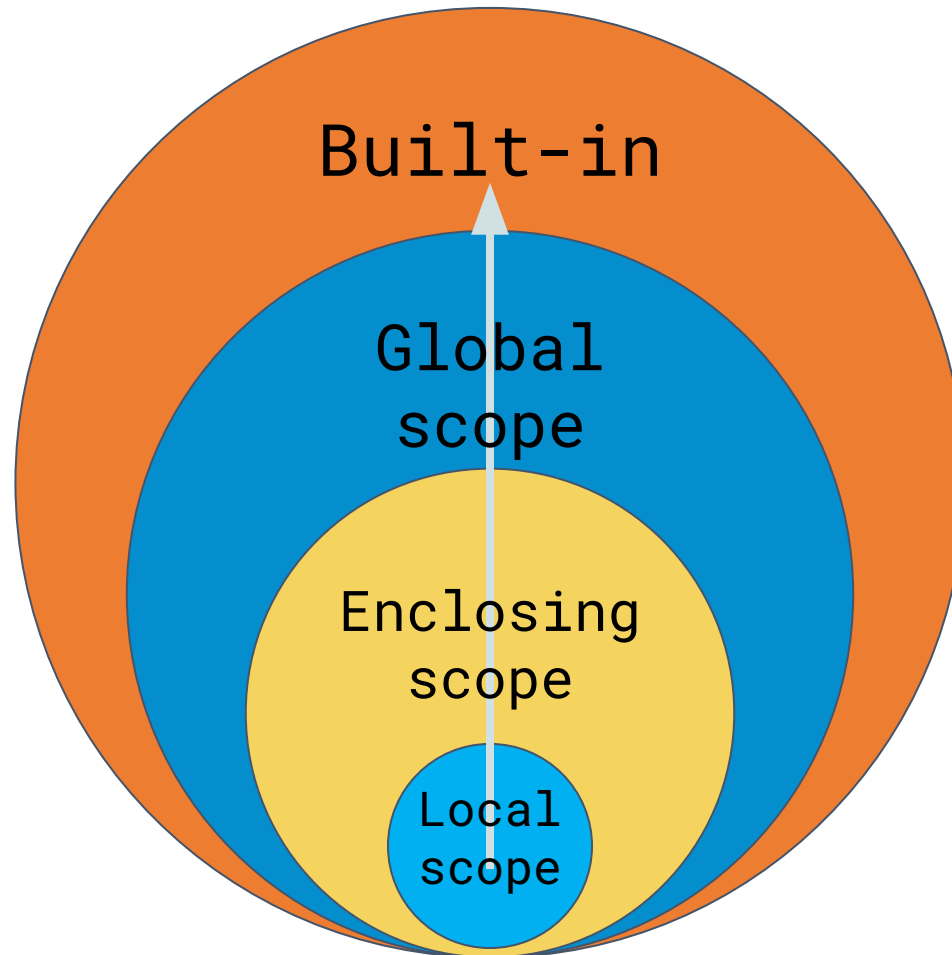
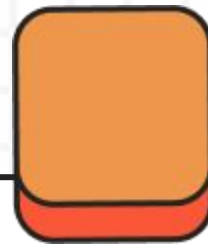
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Funciones: return



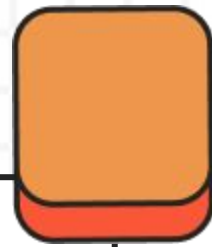






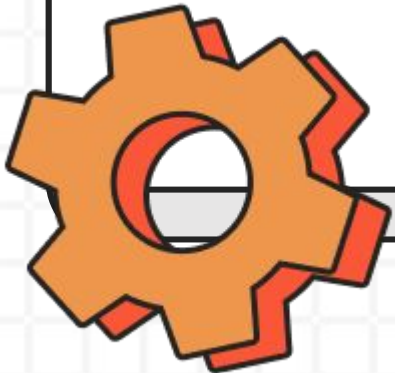
13

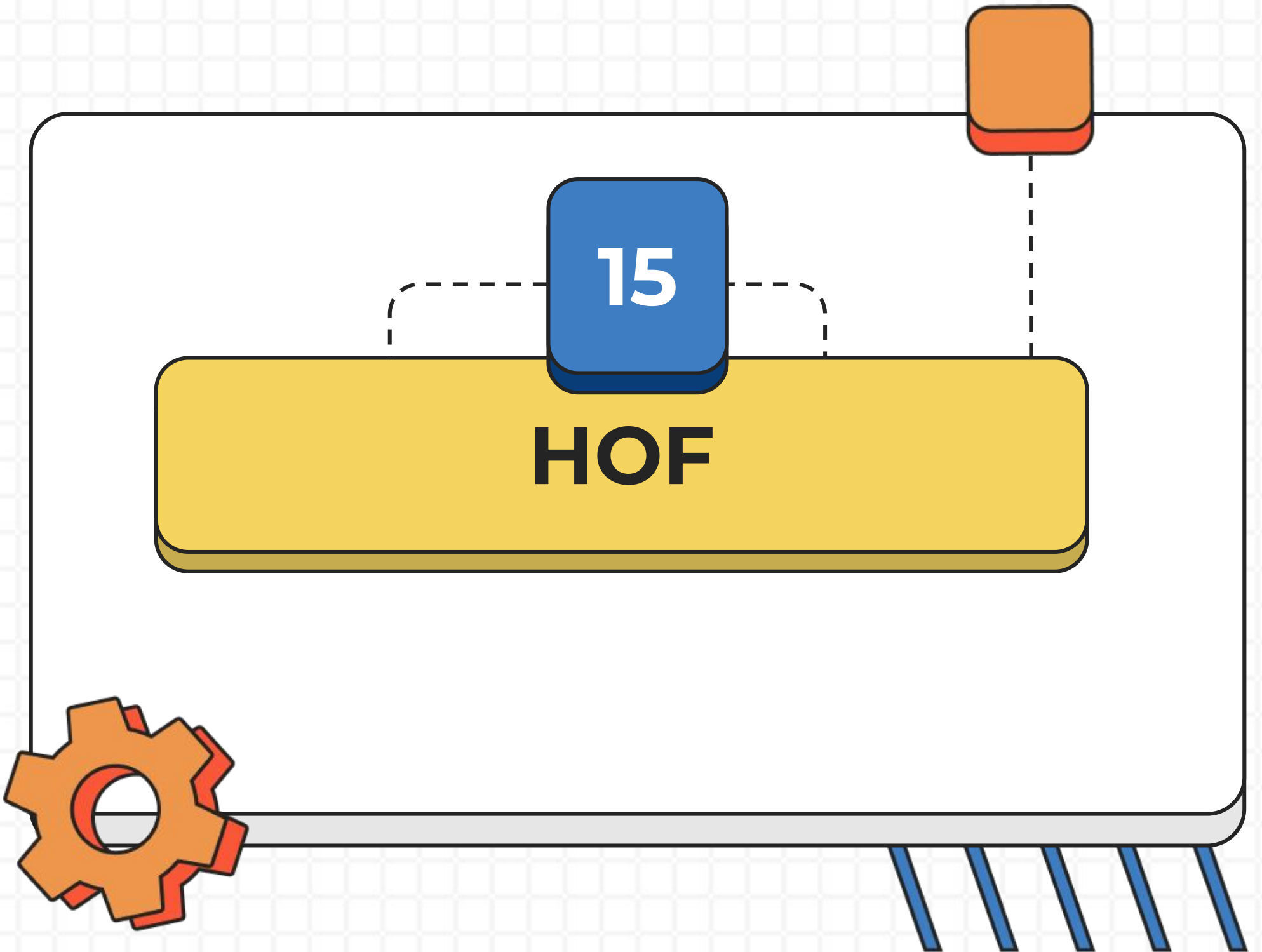
Refactor Game

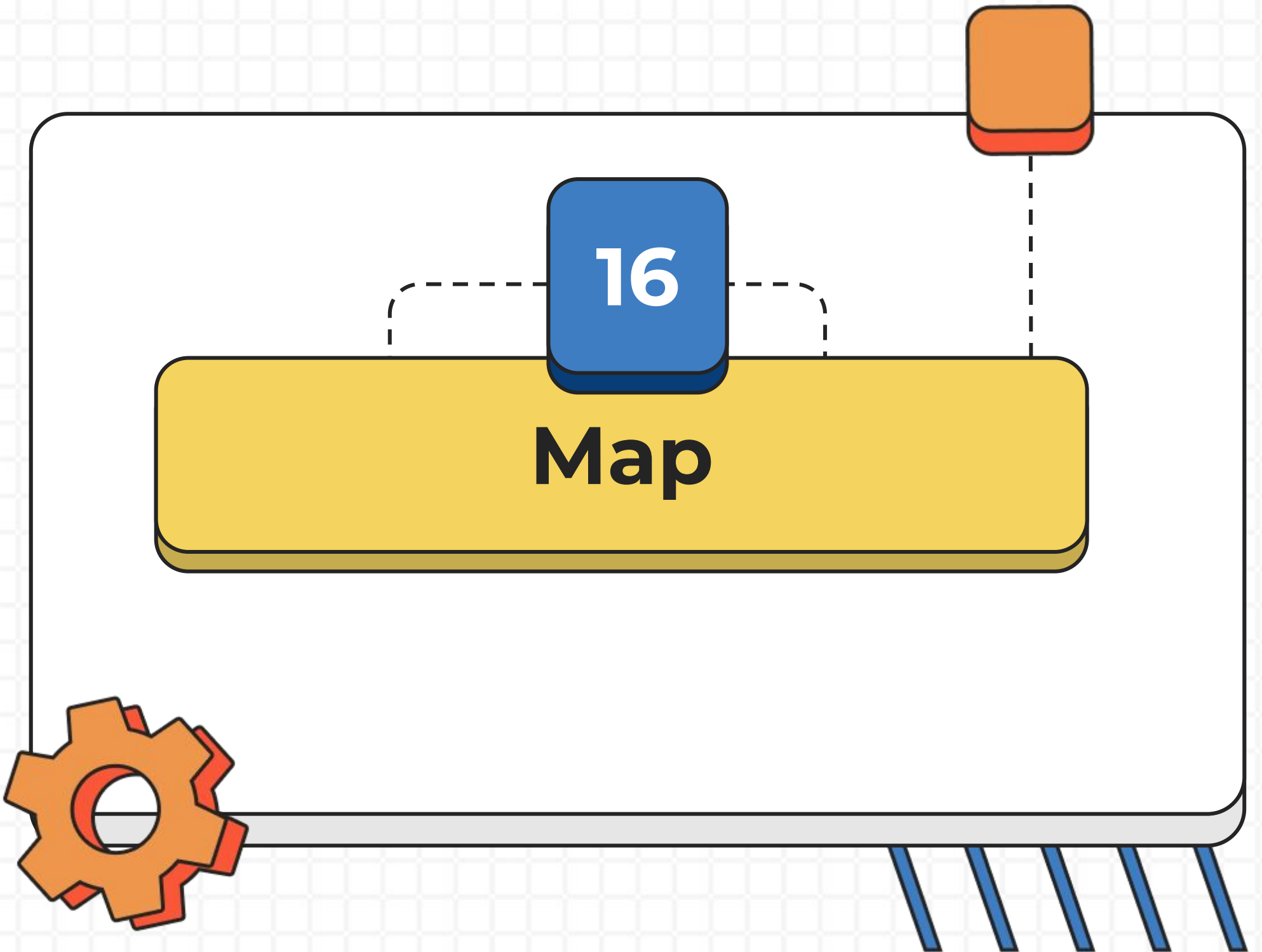


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Lambdas









cook()



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Map & Dicts





cook()





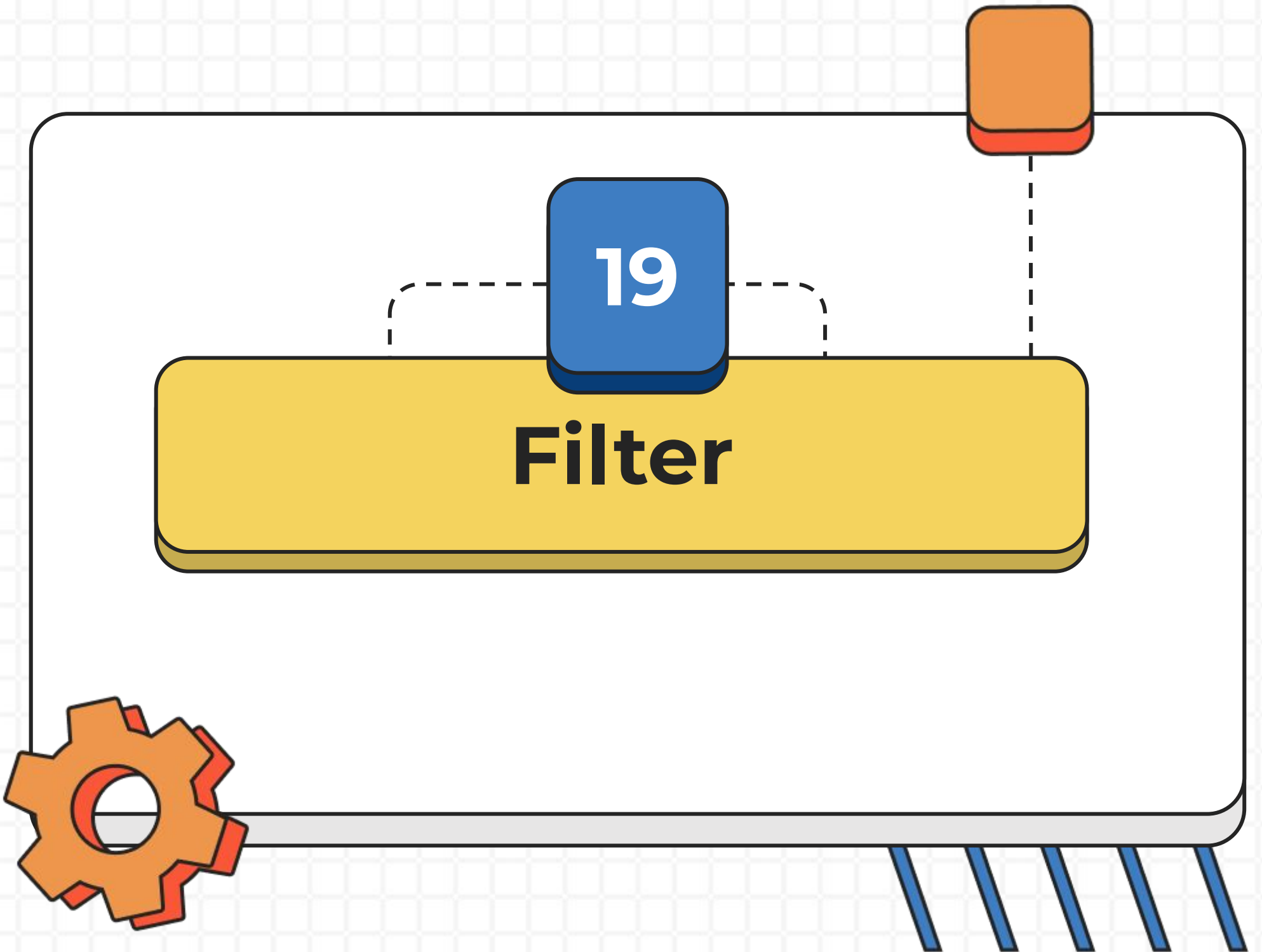
[🚗 , 🚔 , 🚕 , 🚲]



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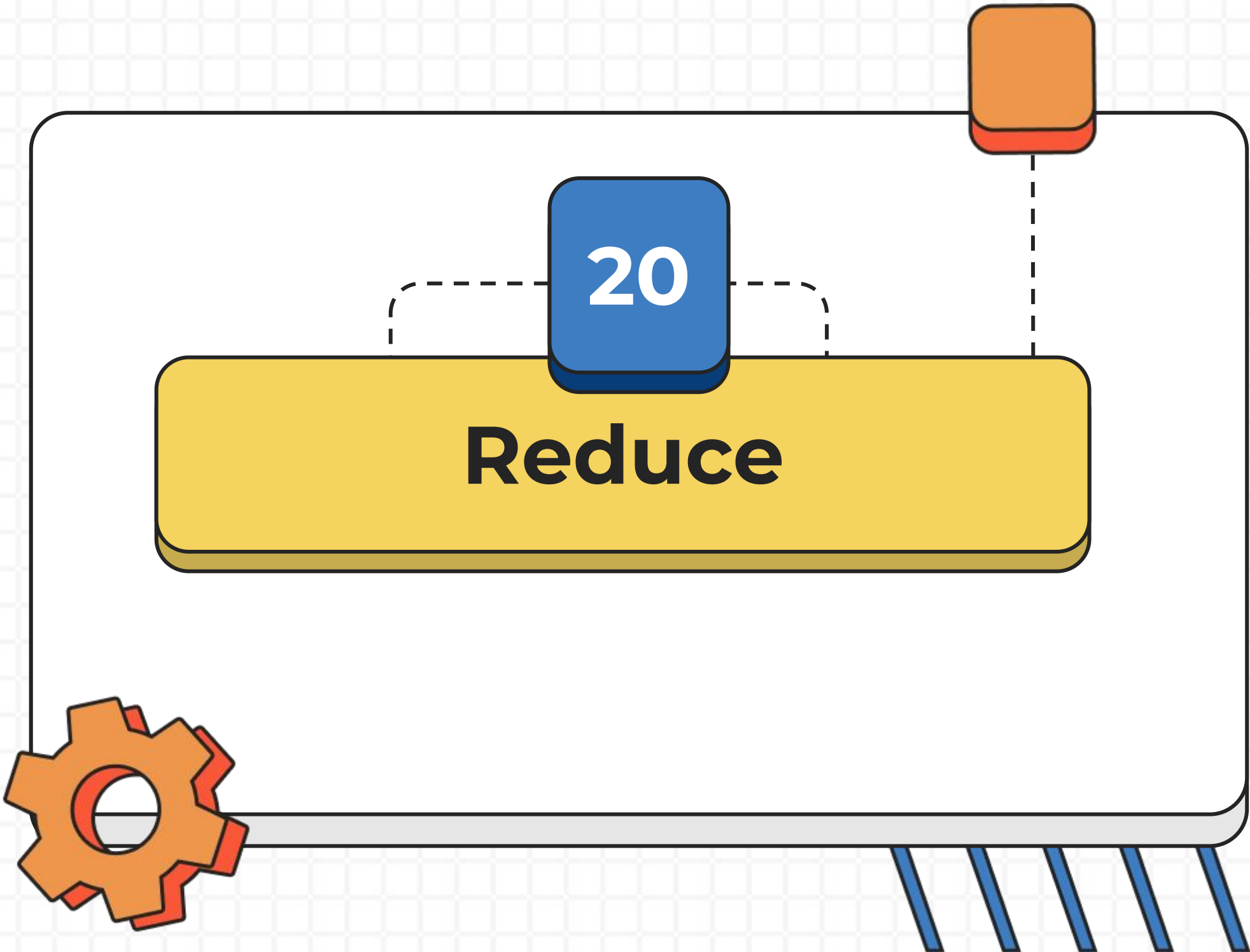
Reto con map











[🍔 , 🍗 , 🍿 , 🍟]





[1, 2, 3, 4]



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Iteration	Counter	Item	Return
1	0	1	1

Iteration	Counter	Item	Return
1	0	1	1
2	1	2	3

Iteration	Counter	Item	Return
1	0	1	1
2	1	2	3
3	3	3	6

Iteration	Counter	Item	Return
1	0	1	1
2	1	2	3
3	3	3	6
4	6	4	10

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Modules



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Módulos propios



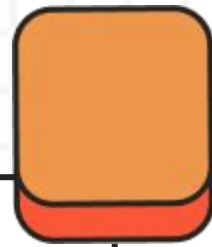
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Corriendo scripts



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Packages



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Iterables



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Errores en Python



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Manejo de excepciones



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Leer un archivo



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Escribir en un archivo




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Leer CSV





```
[
  {
    'Country': 'Colombia',
    'Capital': 'Bogota',
    '2022 Population': 3000,
    'World Population Percentage': 0.12
  },
  {
    'Country': 'Bolivia',
    'Capital': 'Sucre',
    '2022 Population': 500,
    'World Population Percentage': 0.12
  }
]
```



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Crear gráficas




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Proyecto






```
{  
  'Rank': 28,  
  'CCA3': 'COL',  
  'Country': 'Colombia',  
  'Capital': 'Bogota',  
  'Continent': 'South America'  
  '2022 Population': 3000,  
  '2020 Population': 400  
  '2015 Population': 500,  
  'World Population Percentage': 0.12  
}
```





```
{  
  '2022': 3000,  
  '2020': 400,  
  '2015': 500,  
  '2010': 12,  
  '2000': 12,  
  '1990': 23,  
  '1980': 12,  
  '1970': 1212  
}
```



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Proyecto

