NYU TANDON SCHOOL OF ENGINEERING

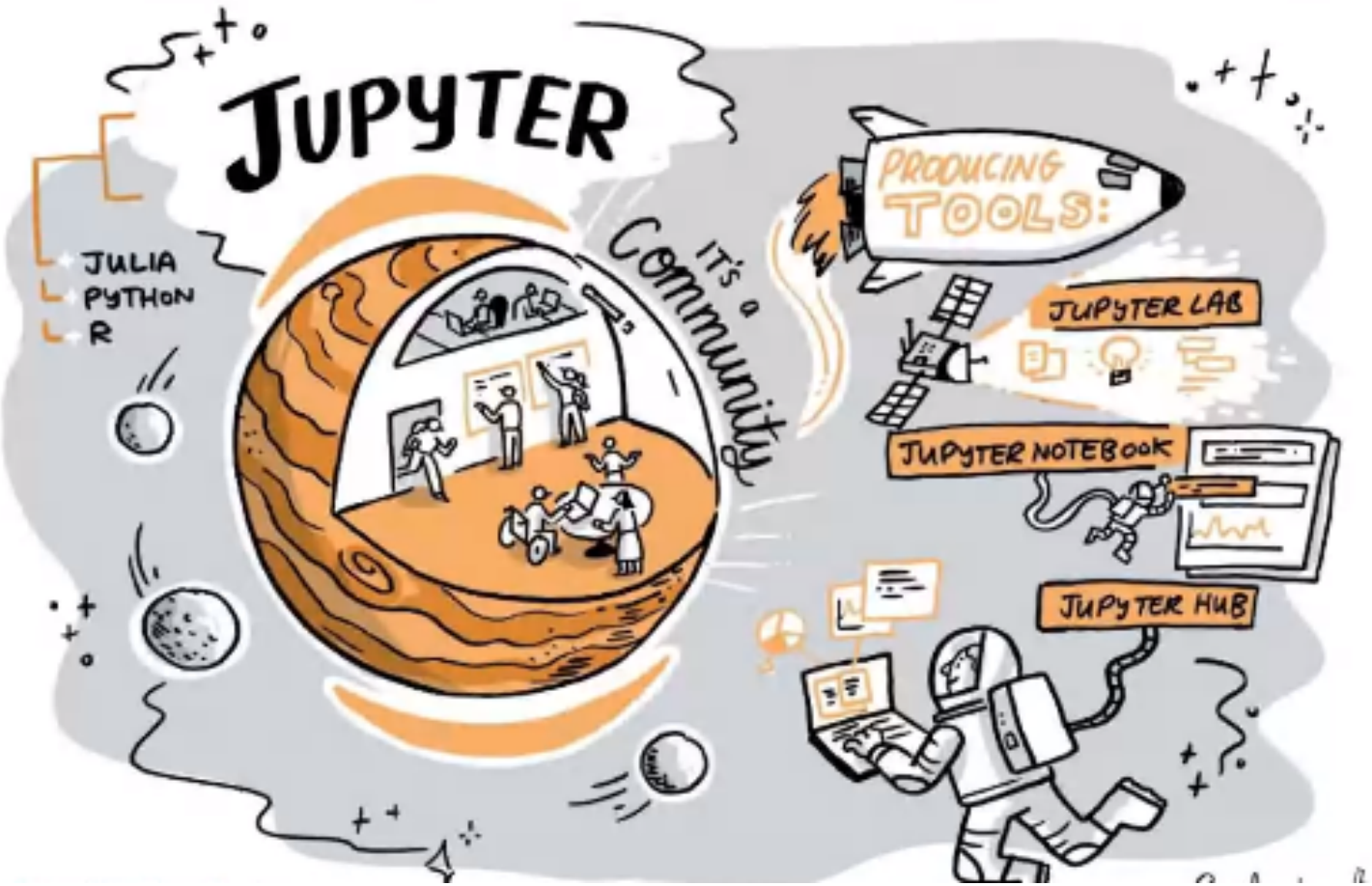
Lab 3
Arrays

Programming for Business Analytics
MG-GY 8401

NYU TANDON SCHOOL OF ENGINEERING

Agenda

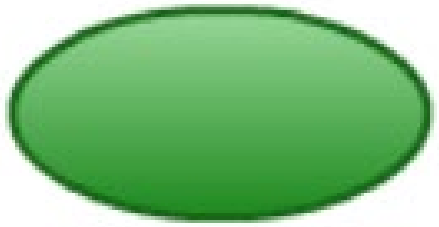
- Classes
  - UML
- Arrays
  - Accessing + Manipulating + Calculating



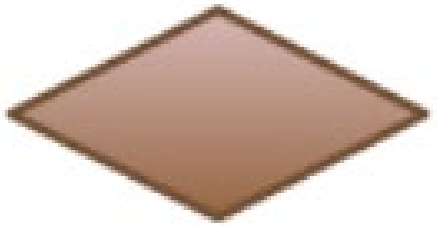
- Describe the learning objectives.
- Summarize the relevant take-aways.
- Ask about unclear information.

Entity Relationship Model

Entity

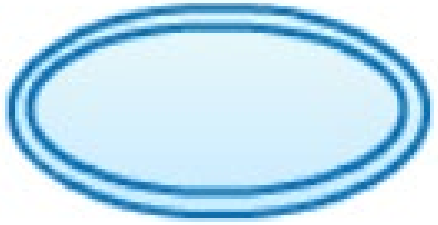


Attribute

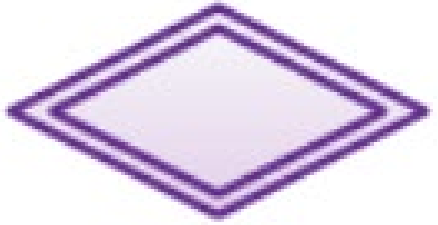


Relationship

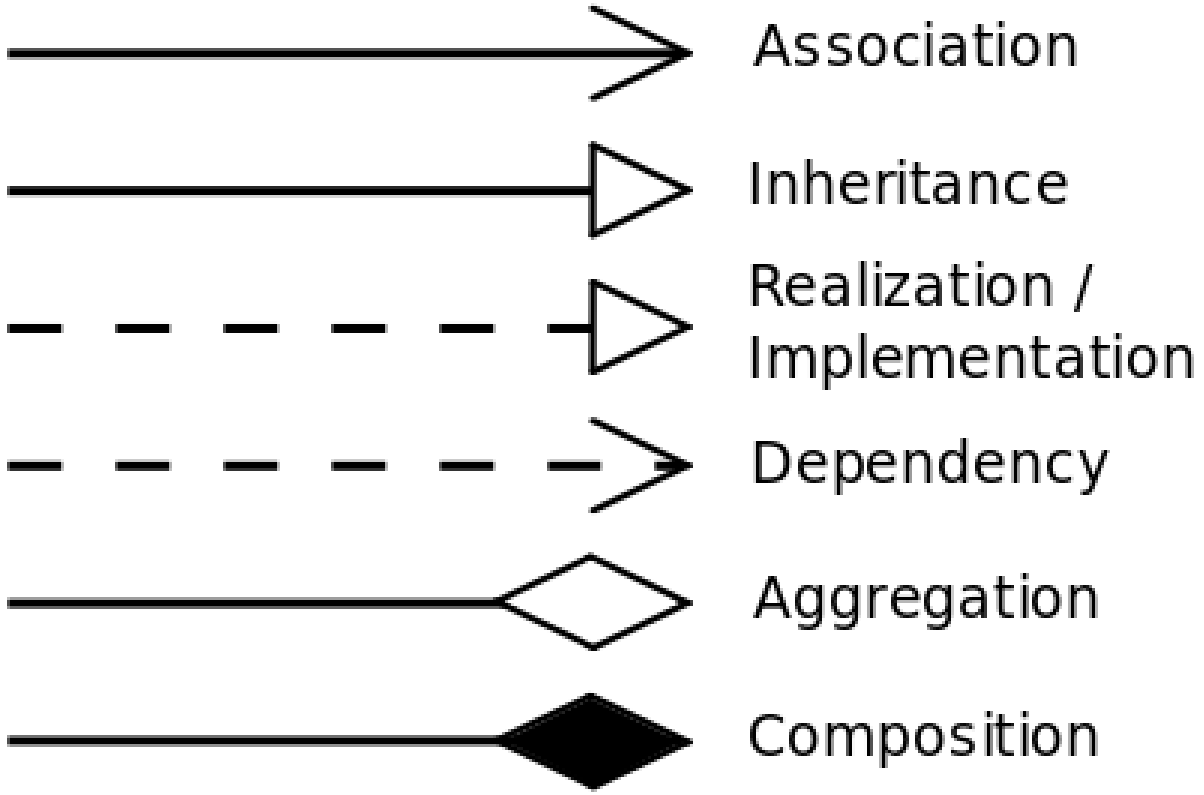
Weak Entity



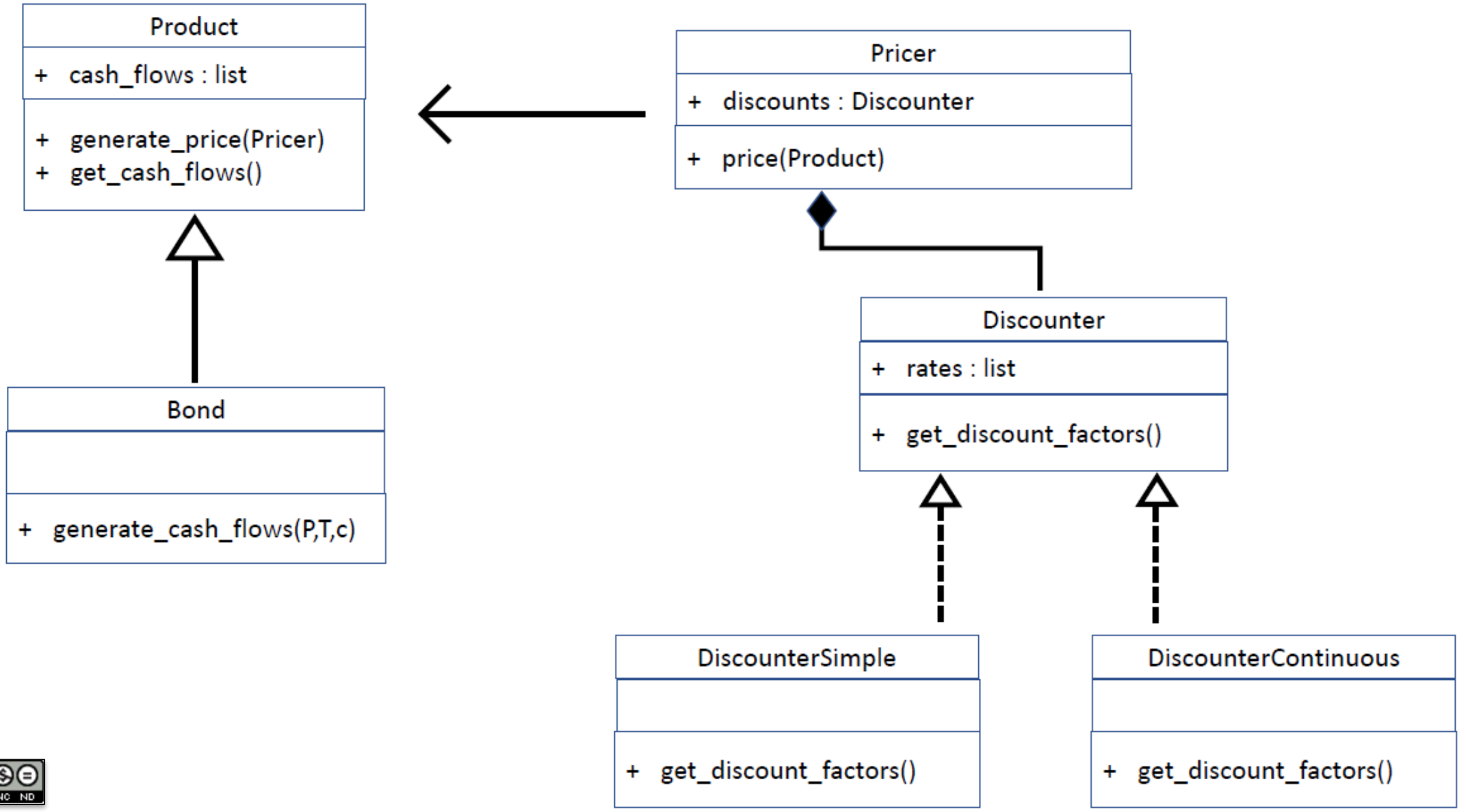
Multivalued Attribute

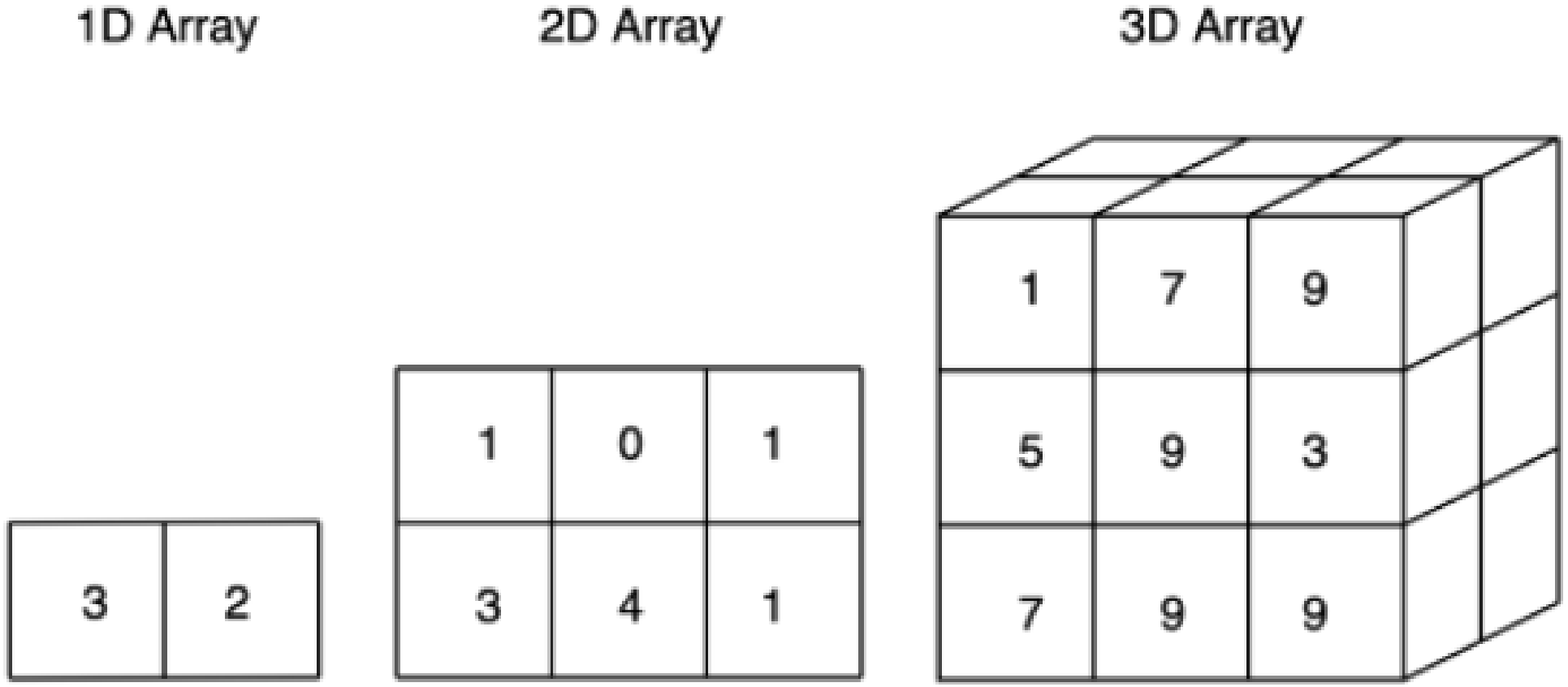


Weak Relationship

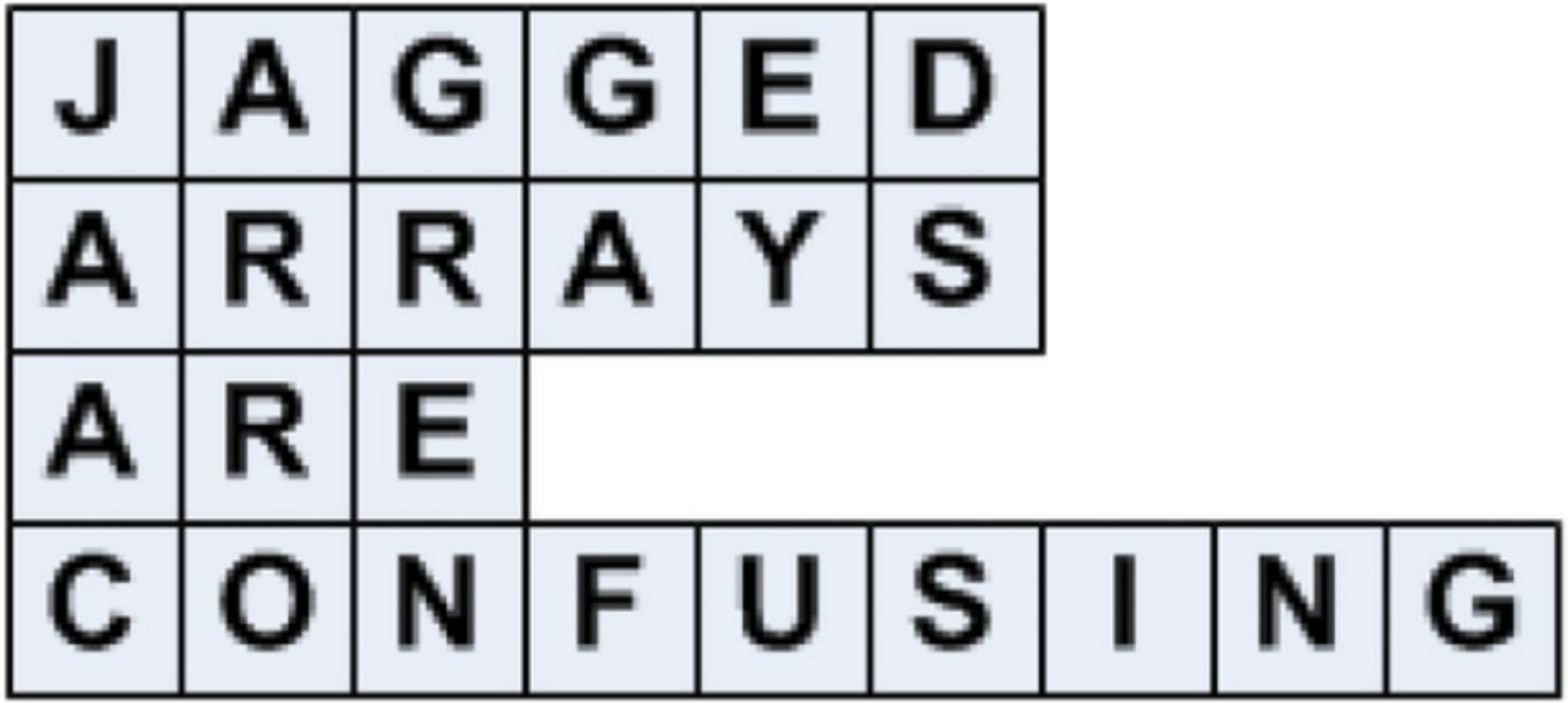


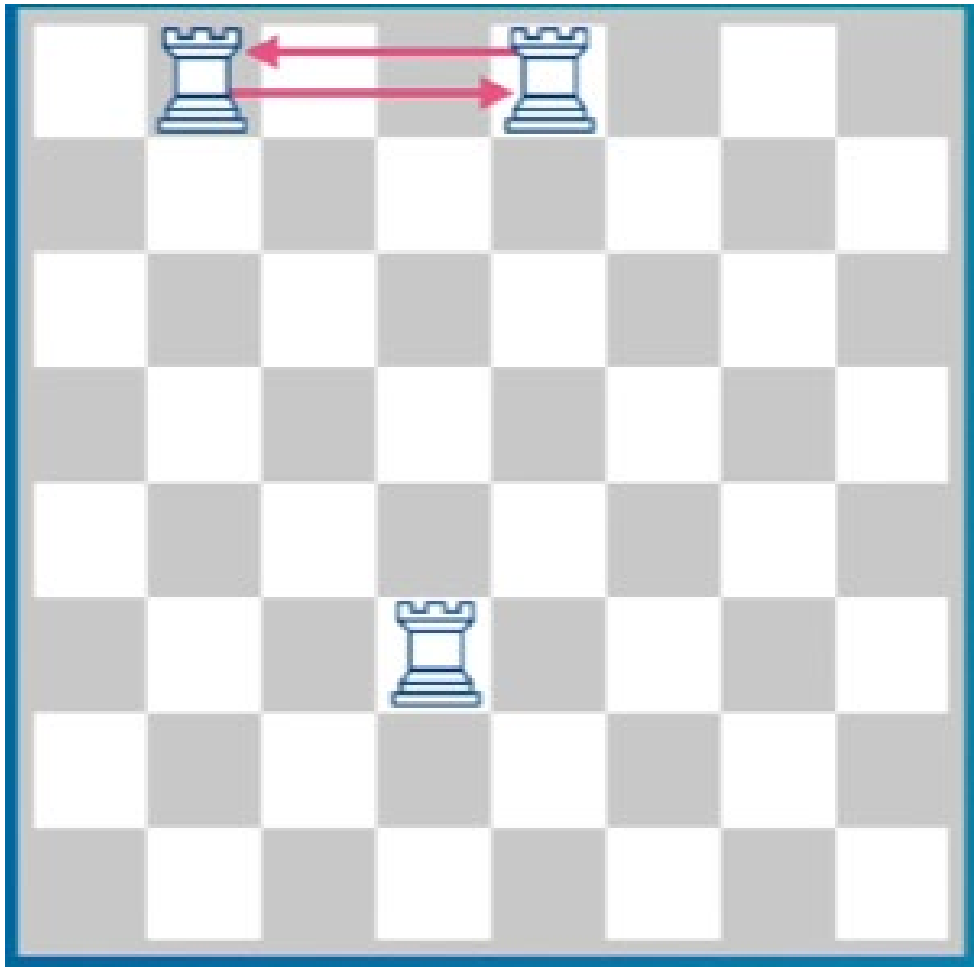
0	No instances (rare)
0..1	No instances, or one instance
1	Exactly one instance
1..1	Exactly one instance
0..*	Zero or more instances
*	Zero or more instances
1..*	One or more instances

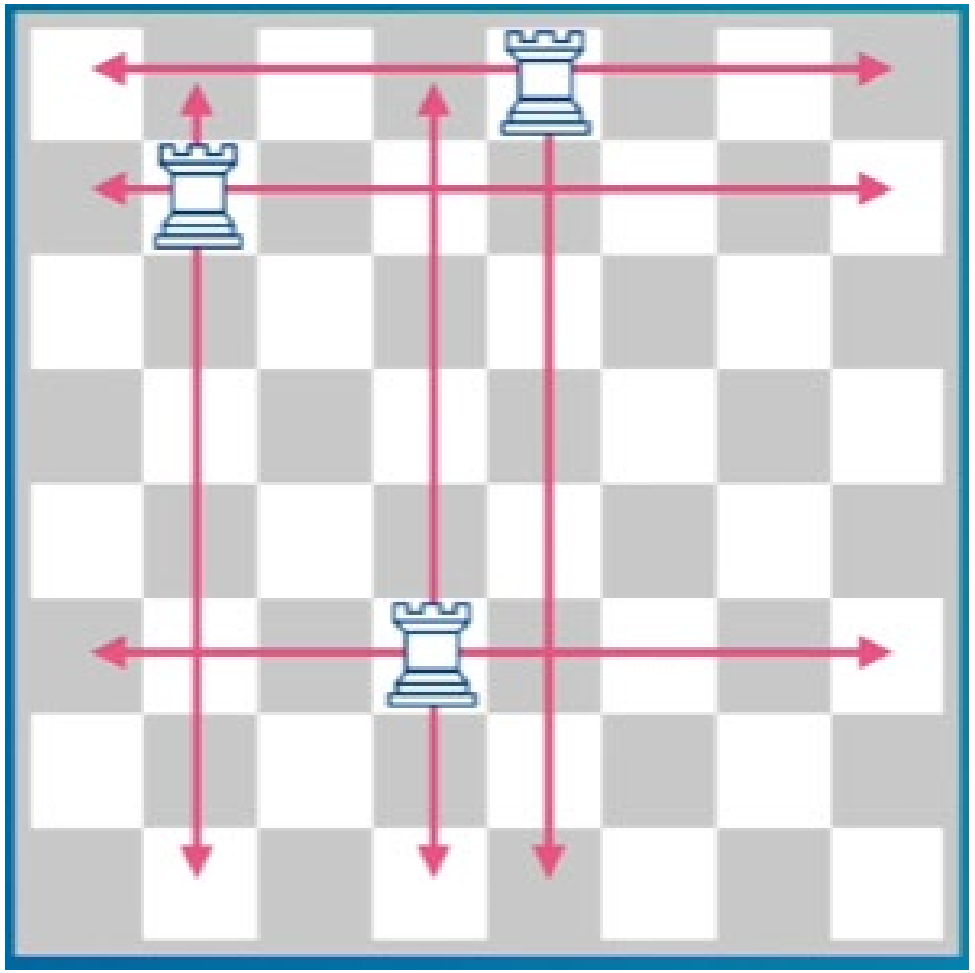

Product
+ cash_flows : list
+ generate_price(Pricer)
+ get_cash_flows()
Pricer
+ discounts : Discounter
+ price(Product)
Discounter
+ rates : list
+ get_discount_factors()
Bond
+ generate_cash_flows(P,T,c)
DiscounterSimple
+ get_discount_factors()
DiscounterContinuous
+ get_discount_factors()



Jagged Arrays







Write a function called **rooks_are_safe**

- Input: 2-dimensional array of 0 and 1
- Output: True if the rooks cannot attack each other. Otherwise False.