



Java API Classes

**Exercises for: Math,
Random, Arrays,
Formatter, BigInteger
and BigDecimal,
Date and Time**



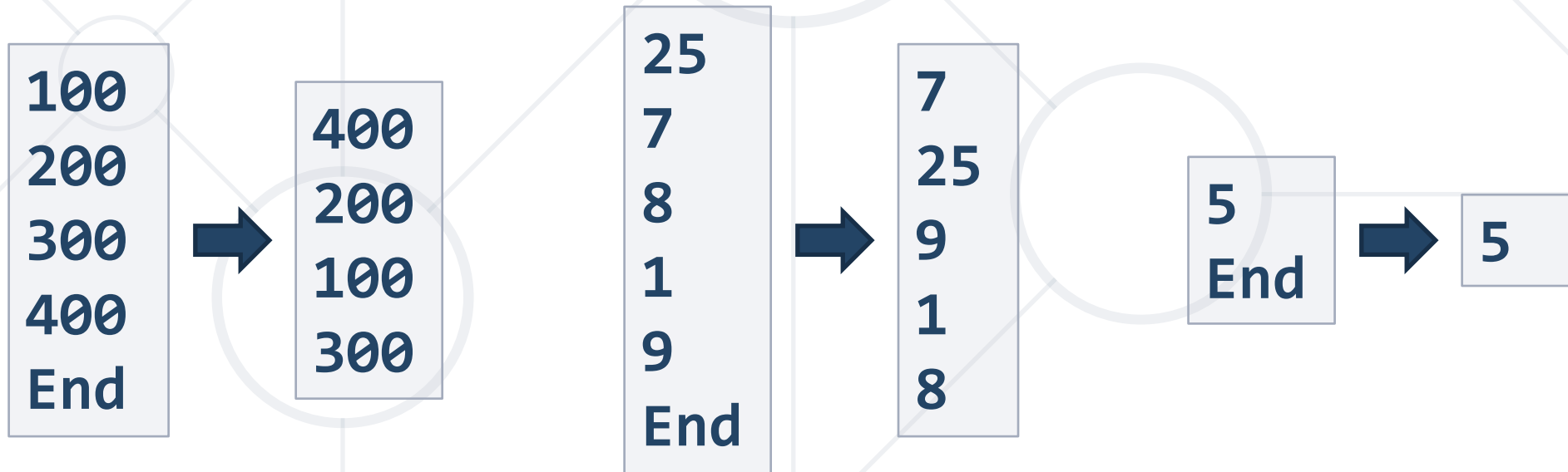
Problem: Random Number in a Range

- Create a program that generates a **random integer number** in given range (inclusively)
- Read the **start** and the **end** of the range from the console



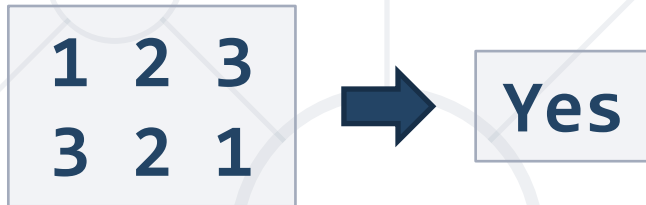
Problem: Randomize Numbers

- Write a Java program to **randomize** a given **list of numbers**
- Use the **java.util.Random** class
- Read the input integers until you reach "**End**"



Problem: Same Element Arrays

- Create a Java program which checks whether two given arrays **consist of the same elements**
 - Arrays will come as two input lines of space-separated integers
 - Print "**Yes**" or "**No**" according the outcome



Problem: Interest Calculator

- Create a program to calculate **the total amount** a person owes after an applied interest rate (in percent)
- Read the **total amount** first, then the interest rate (%)
- Print the result to the console (in the format show below)

100
5



105.00

253000.456
6.07320003



268365.6797696921368

Problem: New Year Countdown

- Create a program to read a date and calculate the **time left** until the new year (1-Jan, the next year)

2021-12-29



3

2022-07-30



155

2024-01-01



366

2020-02-29



307

- Use the **LocalDateTime** class
- Make the solution universal, so that it would work **regardless the current year**
- Hint: use **ChronoUnit.DAYS.between(...)**

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