

# Java - Data Types

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# Organization

1 Data Types

2 Summary

# Programming Review

`https://www.youtube.com/watch?v=FCMxA3m\_Imc` (Until 1:22)

# Data Types

- A variable has a type
  - $\text{int} \sim \mathbb{Z}$
  - $\text{double} \sim \mathbb{R}$
  - $\text{char} = \{ 'a', 'b', \dots \}$
  - $\text{boolean} = \{ \text{true}, \text{false} \}$
  - $\text{String} = \{ "a", "aa", \dots, "b", "bb", \dots \}$
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- Type checking enhances code correctness
- Types increase coding-time

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- Write a program in Java that reads a word in Spanish from the user and tells him/her whether it contains a diphthong.
  - *En español dos vocales en contacto se articulan como diptongo cuando:*
    - *una es cerrada (/i u/) no acentuada y la otra es abierta (/a e o/). O*
    - *ambas son cerradas, excepto si son iguales.*

# Summary

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- ...
- Next Week: User Interface

# References

- W3C Tutorial:

- [https://www.w3schools.com/java/java\\_data\\_types.asp](https://www.w3schools.com/java/java_data_types.asp)
- [https://www.w3schools.com/java/java\\_type\\_casting.asp](https://www.w3schools.com/java/java_type_casting.asp)
- [https://www.w3schools.com/java/java\\_strings.asp](https://www.w3schools.com/java/java_strings.asp)

- Exercises:

<https://www.w3schools.com/java/exercise.asp>

- Java Data Types
- Java Strings
- Java Math