

Java - Data Types

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2 October 2019

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

Exercises

- Write a program in Java that reads two **double** values from the keyboard and prints their sum, difference, product and division at the screen/ console.

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- Write a program in Java that reads a temperature value in Celsius and gives it in Fahrenheit and in Kelvin.
- 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_type_casting.asp
- https://www.w3schools.com/java/java_strings.asp
- https://www.w3schools.com/java/java_booleans.asp

■ Exercises:

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

- Java Data Types
- Java Strings
- Java Booleans