



DATA TYPES (INT, DOUBLE)

zyBook 2.2, zyBook 2.6,
Oracle - Java Tutorial: Primitive Data Types

DATA TYPE BASICS

- What is a data type?
 - Data Type: A name for a category of data values are related
- Why do we care about data types?
 - Java is “strongly typed”, which means that each piece of data that we use has a specific type

DATA TYPE DETAILS

Java supports two types of data types:

- Primitive data types (8 types)
- Objects: state and behavior

PRIMITIVE DATA TYPES

Primitive Data Type	Examples
int Integers (whole numbers) 32-bit integers (min: -2^{31} , max: $2^{31} - 1$)	-53, 0, 7, 116
double Real numbers Double-precision 64-bit floating points	-3.33, 1.0, 73.7
char Single characters	'C', 's', '!', ' ', '5' '\\', '\n', '\t'
boolean Logical values	true, false
byte 8-bit integers (min: -128, max:127)	-53, 0, 7, 116
short 16-bit integers (min: -32,768, max: 32,767)	-53, 0, 7, 116
long 64-bit integers (min: -2^{63} , max: $2^{63} - 1$)	-53, 0, 7, 116
float Single-precision 32-bit floating points	-3.33, 1.0, 73.7