Java data types

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type** | **Contains** | **Default** | **Size** | **Range** |
| **boolean** | true or false | false | 1 bit |  |
| **char** | Unicode character | \u0000 | 16 bits = 24 | \u0000 to \uFFFF |
| **byte** | Signed integer | 0 | 8 bits = 23 | [-128 to 127] = 256 = 28 = -27 a 27 - 1 |
| **short** | Signed integer | 0 | 16 bits = 24 | [-32768 to 32767] = 65536 = 216= -215 a 215 - 1 |
| **int** | Signed integer | 0 | 32 bits = 25 | [-2147483648 to 2147483647] = 232 = -231 a 231 - 1 |
| **long** | Signed integer | 0L | 64 bits = 26 | [-9223372036854775808 to 9223372036854775807] = 264 = -263 a 263 - 1 |
| **float,** | IEEE 754 floating point | 0.0f | 32 bits = 25 | [±1.4E-45 to ±3.4028235E+38] |
| **double,** | IEEE 754 floating point | 0.0d | 64 bits = 26 | [±4.9E-324 to ±1.7976931348623157E+308] |
| **String** |  | null |  |  |
| **BigInteger** |  |  | *any* | Immutable arbitrary-precision integers |
| **BigDecimal** |  |  | *any* | Immutable, arbitrary-precision signed decimal numbers. |