

Data Types

| Data Type | Size | Range | Value Range |
|----------------|----------------------------------|--|--|
| boolean | 1 byte (8bits) | 2 | True and False |
| char | 2 bytes (16bits) | '/u0000' to '/uFFFF' | |
| byte | 1 byte (8bits) | Signed: -2^7 to $2^7 - 1$ Unsigned: 0 to $2^8 - 1$ | Signed: -128 to 127 Unsigned: 0 to 255 |
| short | 2 bytes (16bits) | Signed: -2^{15} to $2^{15} - 1$ Unsigned: 0 to $2^{16} - 1$ | Signed: -32768 to 32767 Unsigned: 0 to 65536 |
| int | 4 bytes (32bits) | Signed: -2^{31} to $2^{31} - 1$ Unsigned: 0 to $2^{32} - 1$ | Signed: -2147483648 to 2147483647 Unsigned: 0 to 4294967295 |
| long | 8 bytes (64bits) | Signed: -2^{63} to $2^{63} - 1$ Unsigned: 0 to $2^{64} - 1$ | Signed: -9223372036854775808 to 9223372036854775807 Unsigned: 0 to 18446744073709551616 |
| float | 4 bytes (32bits) | | approximately $\pm 3.40282347\text{E}+38\text{F}$ |
| double | 8 bytes (64bits) | | approximately $\pm 1.79769313486231570\text{E}+308$ |
| String | (Length of String + 1) * 2 bytes | | |

| Data Type | Wrapper Class |
|----------------|---------------|
| boolean | Boolean |
| char | Character |
| byte | Byte |
| short | Short |
| int | Integer |
| long | Long |
| float | Float |
| double | Double |

| Data Type | *Default Value* |
|--------------------|-----------------|
| boolean | false |
| char | '/u0000' |
| byte | 0 |
| short | 0 |
| int | 0 |
| long | 0 |
| float | 0.0F |
| double | 0.0 |
| String | null |
| Any Objects | null |

This Value is only applicable for instance variables