

KODNEST ASSIGNMENT 3

Submitted by

Name : YADHUKRISHNA MK

Email : yadhu8824@gmail.com

1. What is the range of data you can store in double and float ?

2. How many digits permitted after decimal point in double and float ?

In Java, the ***float*** and ***double*** data types are used to represent floating-point numbers. The ***float*** type is a single-precision 32-bit floating-point number, while the ***double*** type is a double-precision 64-bit floating-point number.

The range and precision of these data types are defined by the IEEE 754 floating-point standard, which Java adheres to.

For ***float***:

- Range: Approximately $\pm 1.4\text{E}-45$ to $\pm 3.4\text{E}+38$
- Precision: Approximately 6-7 decimal digits

For ***double***:

- Range: Approximately $\pm 4.9\text{E}-324$ to $\pm 1.7\text{E}+308$
- Precision: Approximately 15 decimal digits.

It's important to note that these are approximate values because the exact range and precision can vary slightly depending on the specific Java implementation.