

JAVA

DATA TYPE

*PRIMITIVE DATA TYPE

int

In Java, 'int' is a primitive data type used to represent integer values.

It is one of the basic data types provided by the Java programming language.

Here are some key points about the int data type in Java:

1.Size: The int data type is a 32-bit signed two's complement integer.

It can represent integer values in the range of -2^{31} to $2^{31} - 1$.

2.Declaration and Initialization:

```
int myNumber;    // Declaration of an int variable
```

```
myNumber = 42;   // Initialization of the int variable with the value 42
```

3.Default Value: If you declare an int variable without initializing it, it will have a default value of 0.

4.Arithmetic Operations: You can perform various arithmetic operations on int values, such as addition, subtraction, multiplication, and division.

```
int a = 10;
```

```
int b = 5;
```

```
int sum = a + b;    // Addition
```

```
int difference = a - b; // Subtraction
```

```
int product = a * b; // Multiplication
```

```
int quotient = a / b; // Division
```

5.Range Limitations: Since int is a fixed-size data type, it has limitations on the range of values it can represent. If you need to work with larger integers or decimal values, you might use other data types like long or double.

Here's an example of using int in a simple Java program:

```
public class IntExample {  
    public static void main(String[] args) {  
        int myNumber = 7;  
        System.out.println("My number is: " + myNumber);  
    }  
}
```

This program declares an int variable named myNumber and initializes it with the value 7. The program then prints the value of myNumber to the console.