## CYDEO

**Primitive Type Castings** 

#### Primitive Type casting

- Allows us to assign one primitive type value to another primitive type
- There are two types of primitive type castings: implicit and explicit castings
- Cast Operator is needed to manually convert a value



#### Implicit casting

- Casting smaller primitive types to larger primitive types
- Implicitly done by the compiler

```
byte a = 25;
int b = a;
```

```
short x = 1000;
long y = (long)x;
```



#### **Explicit casting**

- Casting larger primitive types to smaller primitive types
- Must be done explicitly

```
int a = 100;
byte b = (byte) a;
```

```
long x = 2000;
short y = (short) x;
```



# CYDEO

**Arithmetic Operators** 

### **Arithmetic Operators**

| NAME           | OPERATOR | PURPOSE & NOTES                              | EXAMPLE | RESULT |
|----------------|----------|----------------------------------------------|---------|--------|
| ADDITION       | +        | Adds one value to another                    | 10+5    | 15     |
| SUBTRACTION    | -        | Subtracts one value from another             | 10-5    | 5      |
| DIVISION       | /        | Divides two values                           | 10/5    | 2      |
| MULTIPLICATION | *        | Multiplies two values                        | 10*5    | 50     |
| MODULUS        | %        | Divides two values and returns the remainder | 10%3    | 1      |

