



# Basic Programming and OOP

Rawlabs Academy

# Tools and IDE

- JDK
- IDE

# Java Development Process

any

# Basic Programming

## Hello World!

```
public class Main {  
  
    public static void main(String[] args) {  
        System.out.println("Hello World!");  
    }  
  
}
```

# Data Type (Integer)

Data Type	Min	Max	Size	Default
byte	-128	127	1 byte	0
short	-32,768	32,767	2 bytes	0
int	-2,147,483,648	-2,147,483,647	4 bytes	0
long	-9,223,372,036,854,755,808	-9,223,372,036,854,755,807	8 bytes	0

# Data Type (Decimal)

Data Type	Min	Max	Size	Default
float	3.4e-038	34.e+038	4 bytes	0
double	1.7e-308	1.7e+308	8 bytes	0

# Variable

## Declaration

- `data_type variable_name = value`

## Example

```
int myInt;  
long balance = 1000001;  
String name = "Maverick";  
double value = 1.71;  
  
int age = 10;  
byte ageAsByte = (byte) age;
```

# Primitive & Non Primitive

**Primitive** default value is **0** but, **non primitive** is allow **nullable**;

Data Type Primitive	Data Type Non Primitive
byte	Byte
short	Short
int	Integer
long	Long
float	Float
double	Double
char	Char
boolean	Boolean



# Array

```
char[] rawlabs = new char[] {'r', 'a', 'w', 'l', 'a', 'b', 's'};
```

```
char[] rlabs = new char[7];
```

```
rlabs[0] = 'r';
```

```
rlabs[1] = 'a';
```

```
rlabs[2] = 'w';
```

```
rlabs[3] = 'l';
```

```
rlabs[4] = 'a';
```

```
rlabs[5] = 'b';
```

```
rlabs[6] = 's';
```

# Operator

Operator	Symbol
Assignment	=
Arithmetic	+ - * / %
Unary	+ - ++ -- !
Equality and Relational	== != > >= < <=
Conditional	&&