

Data Types

Java data types:

- primitive
- non-primitive or classes

There are 8 primitive Java data types:

boolean, char, byte, short, int, long, float, double

Computer Model

Each memory cell has a unique address

8 bits = 1 byte



Memory

01101100	11010101	11100110	00010101		
⋮	⋮	⋮	⋮	⋮	⋮

1

2

3

4

```

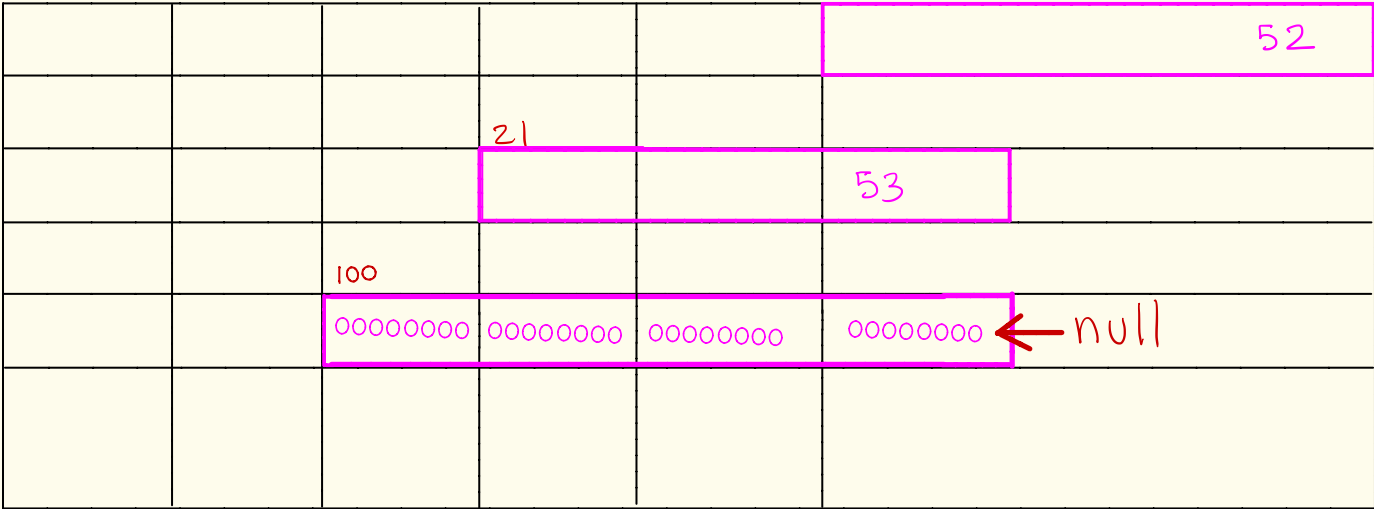
int a, b;
a = 52;
b = a + 1;
Person p;

```

Symbol table

variable	type	address
a	int	6
b	int	21
p	Person	100

Memory



Data Types

- A variable of a **primitive** type stores a **value**.
- A variable of a **non-primitive** type stores an **address**.

Example of a Java Class

```
public class Person {  
    /* Attribute declarations */  
    private String lastName;  
    private String firstName;  
    private String email;  
    public int age;  
    ...  
  
    // Method declarations  
    public String getEmail() {  
        return email;  
    }  
  
    public void setEmail (String mail) {  
        email = mail;  
    }  
}
```

```

int a, b;
a = 52;
b = a + 1;
Person p;
p = new Person();
p.age = 1;

```

De referensering
"."

Symbol Table

var	type	Address
a	int	6
b	int	21
p	Person	100

Memory

