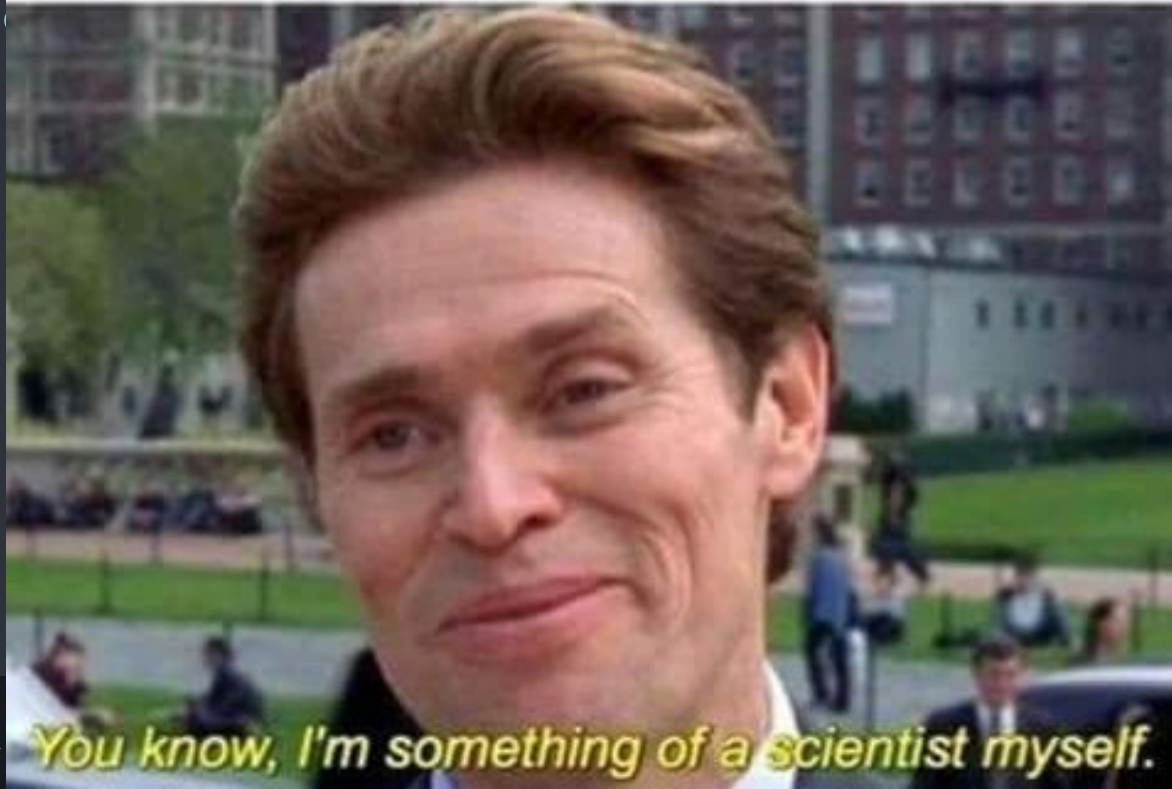


When your teacher is talking
about Java and you remember
Minecraft was made with Java



Now with

Sommaire {

01 Théorie

< En cours, on comprend
mais rien ne marche >

02 Pratique

< En TP, ça marche mais on
sait pas pourquoi >

03 CF

< En CF, théorie et
pratique sont combinées,
rien ne marche, et on ne
sait pas pourquoi >

}

```
1 Object var = value;
```

```
2  
3 Java est fortement typé → Types des variables est explicite
```

```
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14
```

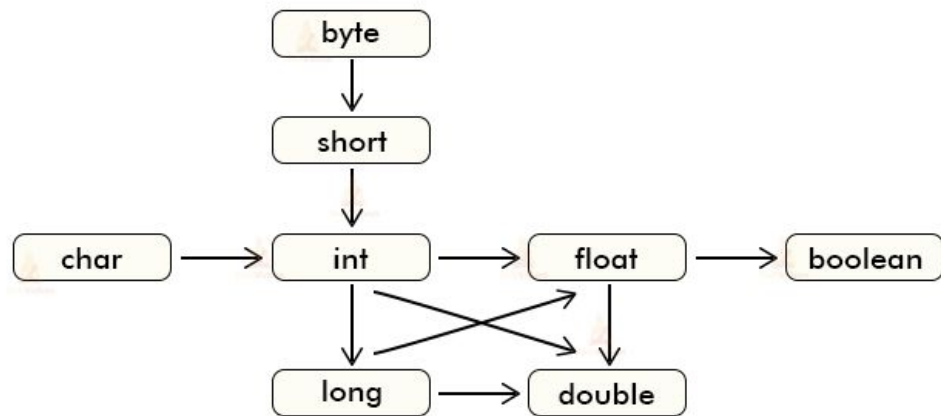
Primitive	Classe	Taille (octet)
boolean	Boolean	1
char	Character	1
byte	Byte	1
short	Short	2
int	Integer	4
long	Long	8
float	Float	4
double	Double	8

Now with garbage distributor

```
String var = (String)value;
```

Il est possible de faire de la **conversion** de type

Implicit Type Conversion in Java



Now with garbage distributor

```
1  class lesClasses {
2
3
4      //Au coeur du fonctionnement
5      //de Java
6
7      private int[] lesAttributs;
8
9      static void lesMethodes() {}
10
11     String lesInstances() {}
12
13 }
14
```

```
1 private int[] lesAttributs;
```

```
2  
3 int health;
```

```
Item heldItem;
```

```
4  
5  
6 int[] stats;
```

```
boolean[]  
statusEffects;
```

```
7  
8  
9 String name;
```

```
Ability[]  
abilities;
```



```
1 static void lesMethodes() {
```

```
5     static Image getSprite() → .png
```

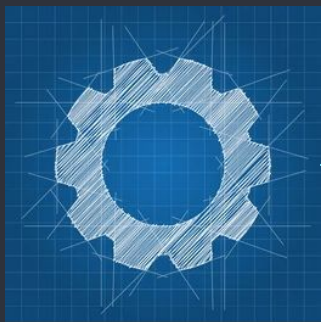
```
8     static int getNationalId() → 7
```

```
11    public static void main(String[] args)
```

```
14 }
```

Now with garbage distributor

```
1 String lesInstances() {
```



```
6  
7  
8 → Bulbizarre bébé = new Bulbizarre(); →
```



bébé

```
11 class Bulbizarre
```

```
12  
13  
14 }
```

Now with garbage distributor

```
1 String lesMethodes(int instance)
2 {
3
4
5     int getHealth();
6
7
8
9     Ability[]
10    getAbilities();
11
12
13
14 }
```



```
void passive();
```

```
void
getDamage();
```

```
1 class Héritage
```

```
2 extends Héritage
```

```
3 implements Interfaces {}
```

```
4  
5  
6  
7  
8  
9  
10 abstract class ClassesAbstraites {}
```

```
11  
12  
13 //La puissance de la  
14 //POO
```

Now with garbage distributor

extends Héritage



```
class PNJ
    String name;
    String[] dialogs;
    void doAI();
```

```
class Trainer extends PNJ
    Pokemon[] party;
    void fight();
```



Now with garbage distributor

implements Interfaces

```
interface Pokemon
```



Contrat

Pour être reconnu
"Pokémon", je dois
implémenter :

- void getSprite()
- int getHP()
- ...

```
class Evoli implements Pokemon
```



```
1 abstract class ClassesAbstraites {
```

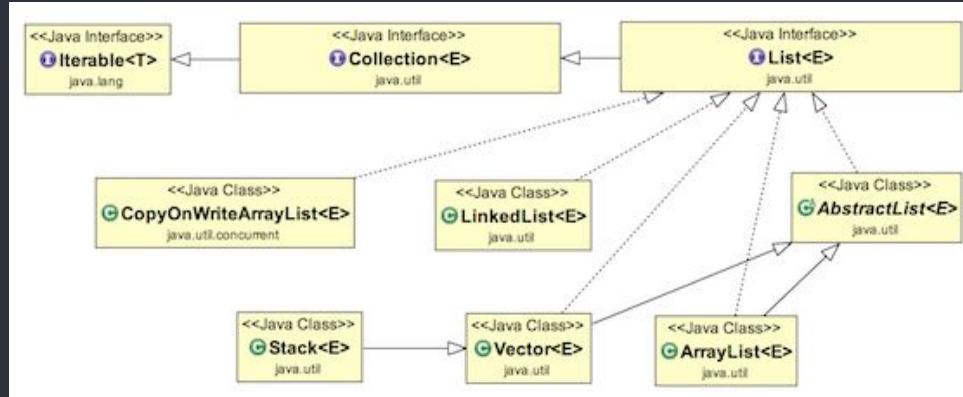


```
14 }
```

Now with garbage distributor

```
1 class ClassesGeneriques<T> {
```

Génération de plusieurs copies de la classe avec les `T` utilisés



```
14 }
```

Now with garbage distributor

Exceptions

WHEN SOMETHING GOES WRONG

Exception

Java

Exception Handling in Java

```
try{
```



Exceptions...

Gotta catch 'em all!

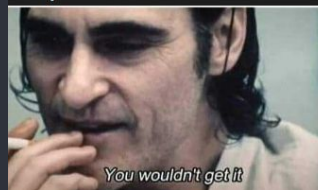
```
}catch( Exception ){  
    //Do nothing  
}
```

Now with garbage distributor

Bon courage pour le TP



```
1 public class Meme
2 {
3     private Joke joke;
4
5     public void setJoke(Joke newJoke)
6     {
7         this.joke = newJoke;
8     }
9 }
```



Now with garbage distributor