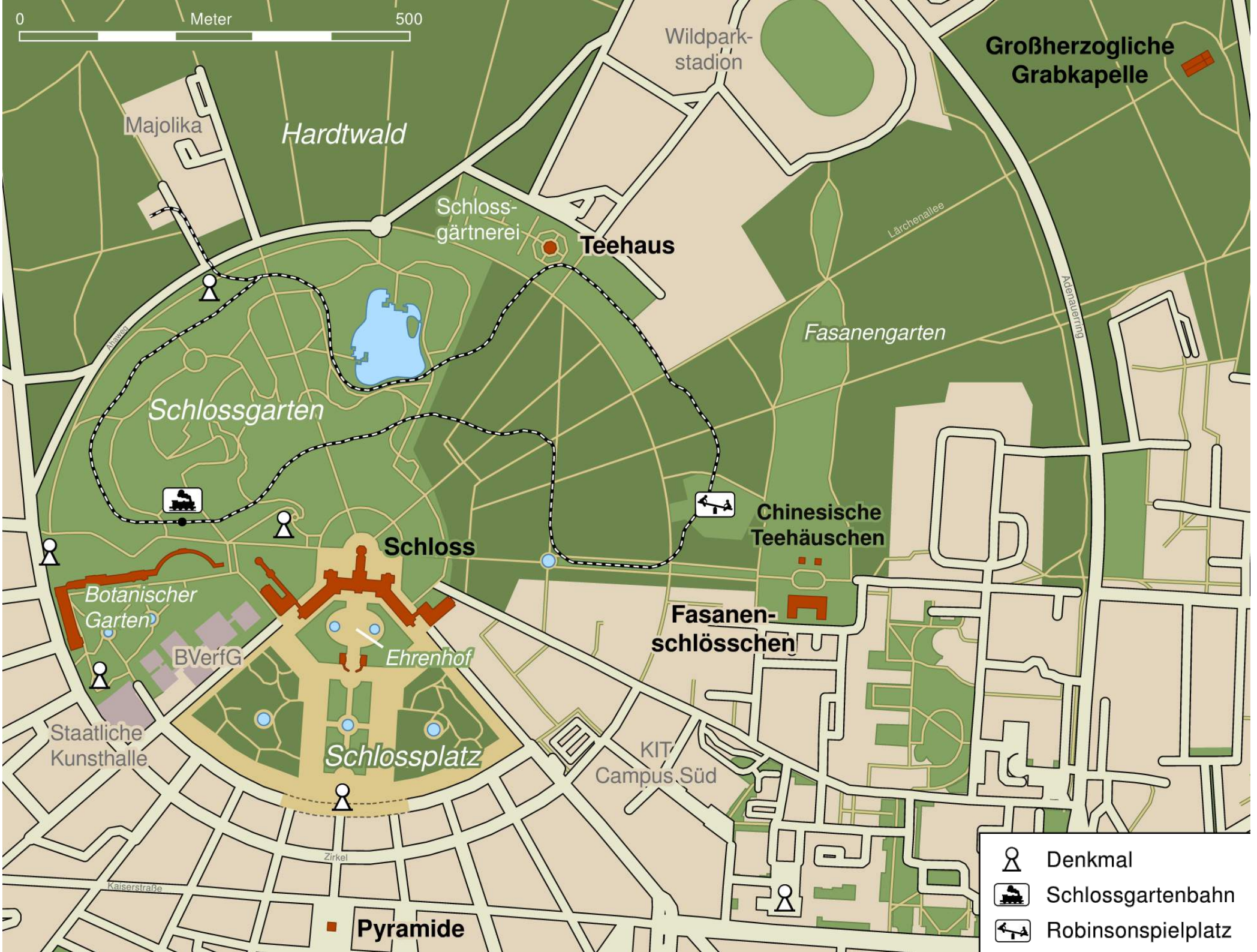
Value Objects - The Next Big Thing for Java



Karte: Mmmmmich/Wikipedia


www.entwicklertag.de
2015
Sponsoren
Microsoft
FIDUCIA
Ihr IT-Partner
L-BANK
Staatsbank für Baden-Württemberg
Organisation
andrena
OBJECTS
TPK
Technologiepark Karlsruhe
Veranstalter
VKSI
ObjektForum

#etka15

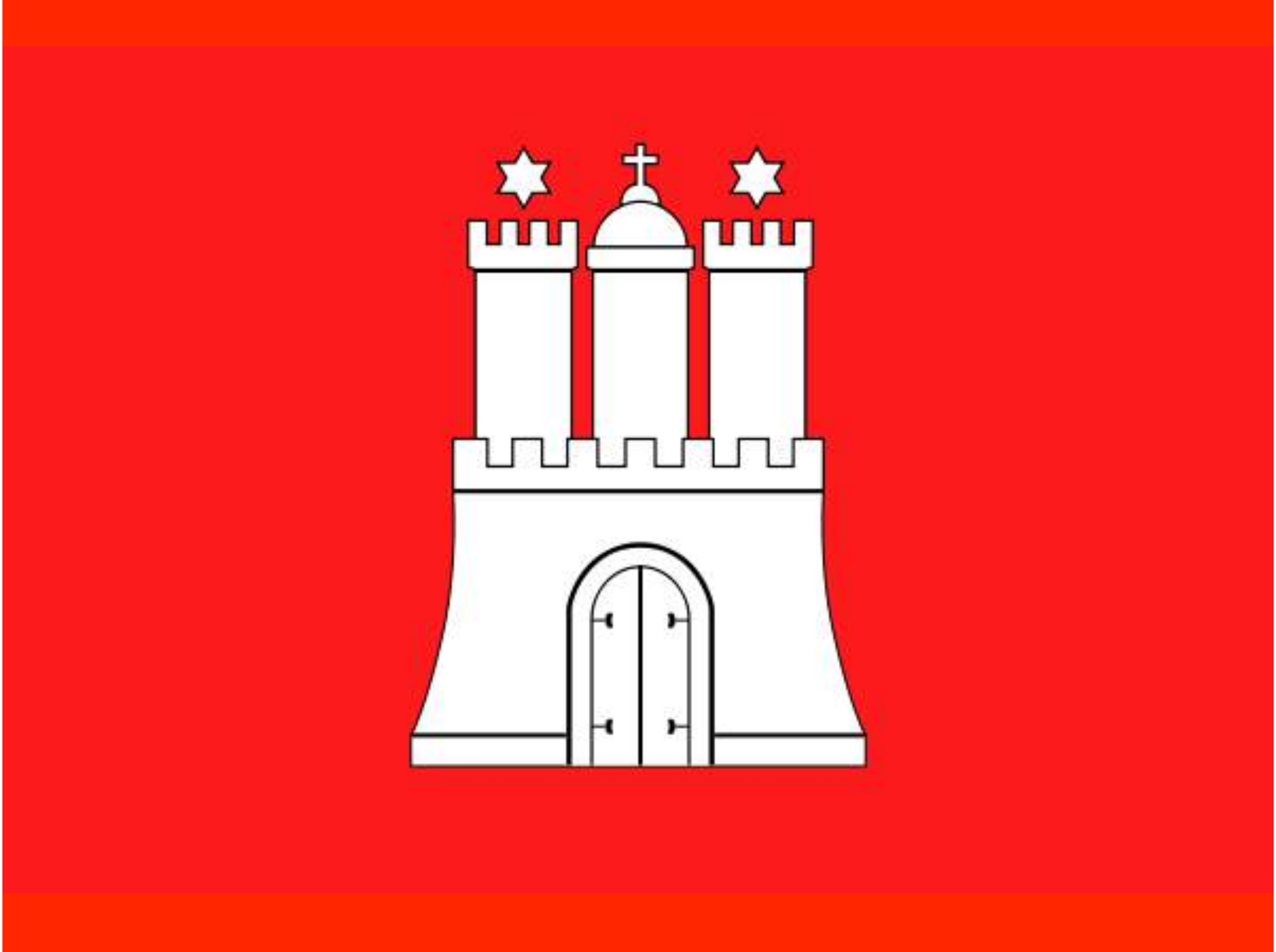
Foto: A. Markiewicz

HENNING

SCHWENTNER

Quelle: http://www.schulbilder.org/malvorlage-informatiker-i10418.html


WPS
WORKPLACE
SOLUTIONS



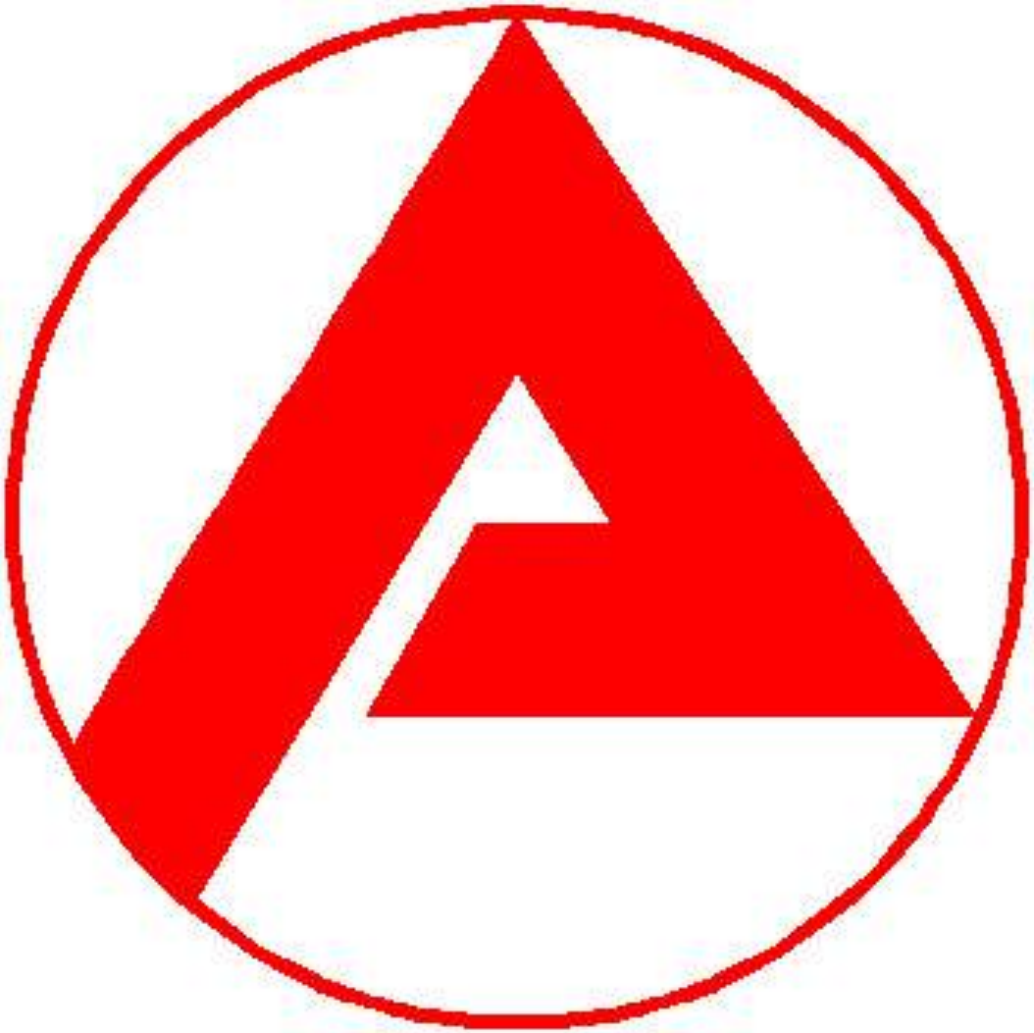


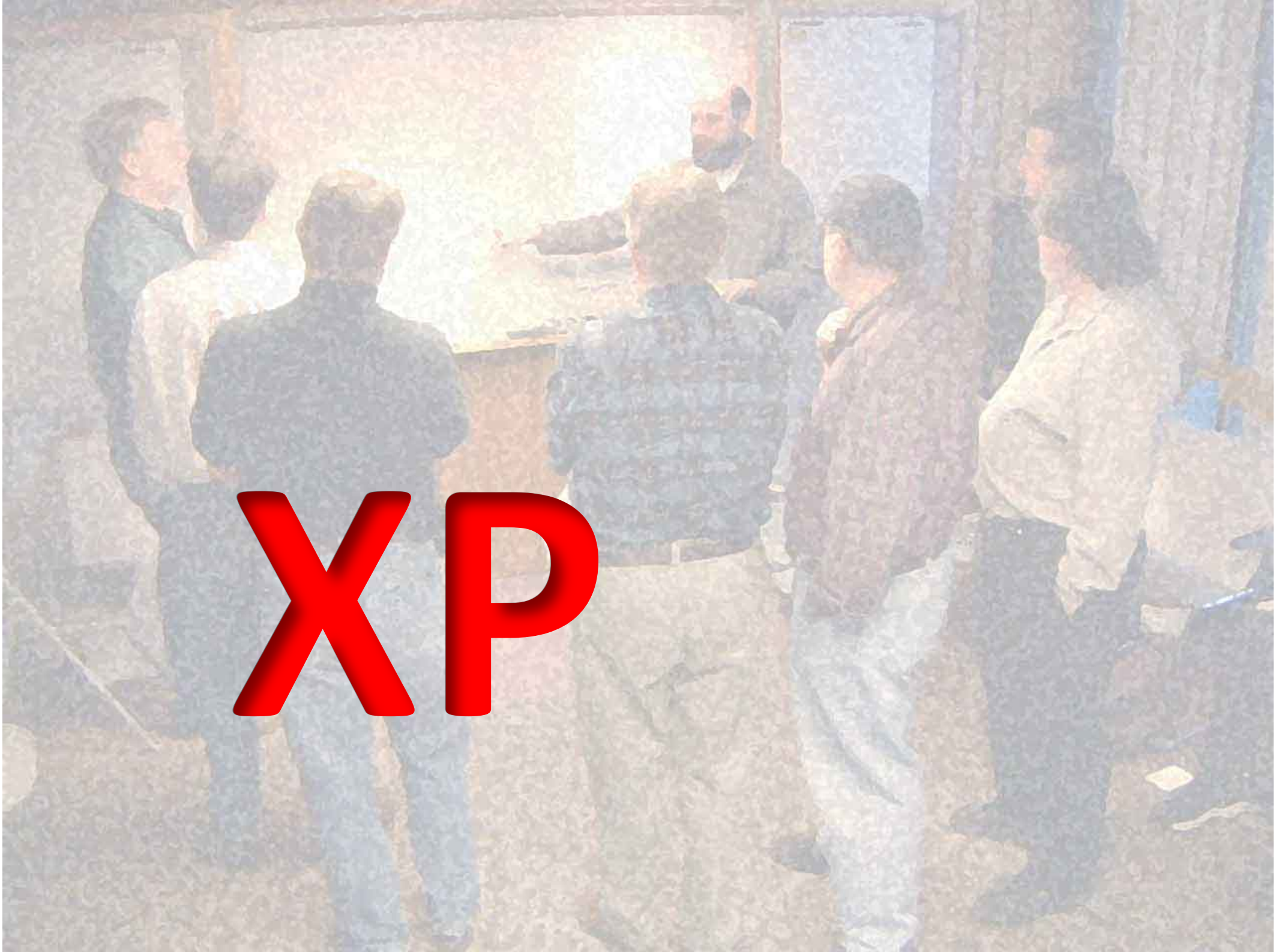
Foto: H. Schwentner


WPS
WORKPLACE
SOLUTIONS

Foto: J. Rost


Agil


SCRUM


XP


Java


C#


SAP
®


razorfish
WILL CODE
ABAP For
FOOD
PLEASE
HELP
GOD BLESS YOU


WPS
WORKPLACE
SOLUTIONS


WERBUNG
UHF
VHF
HOME
MUSIC
BLOG

So

16:48

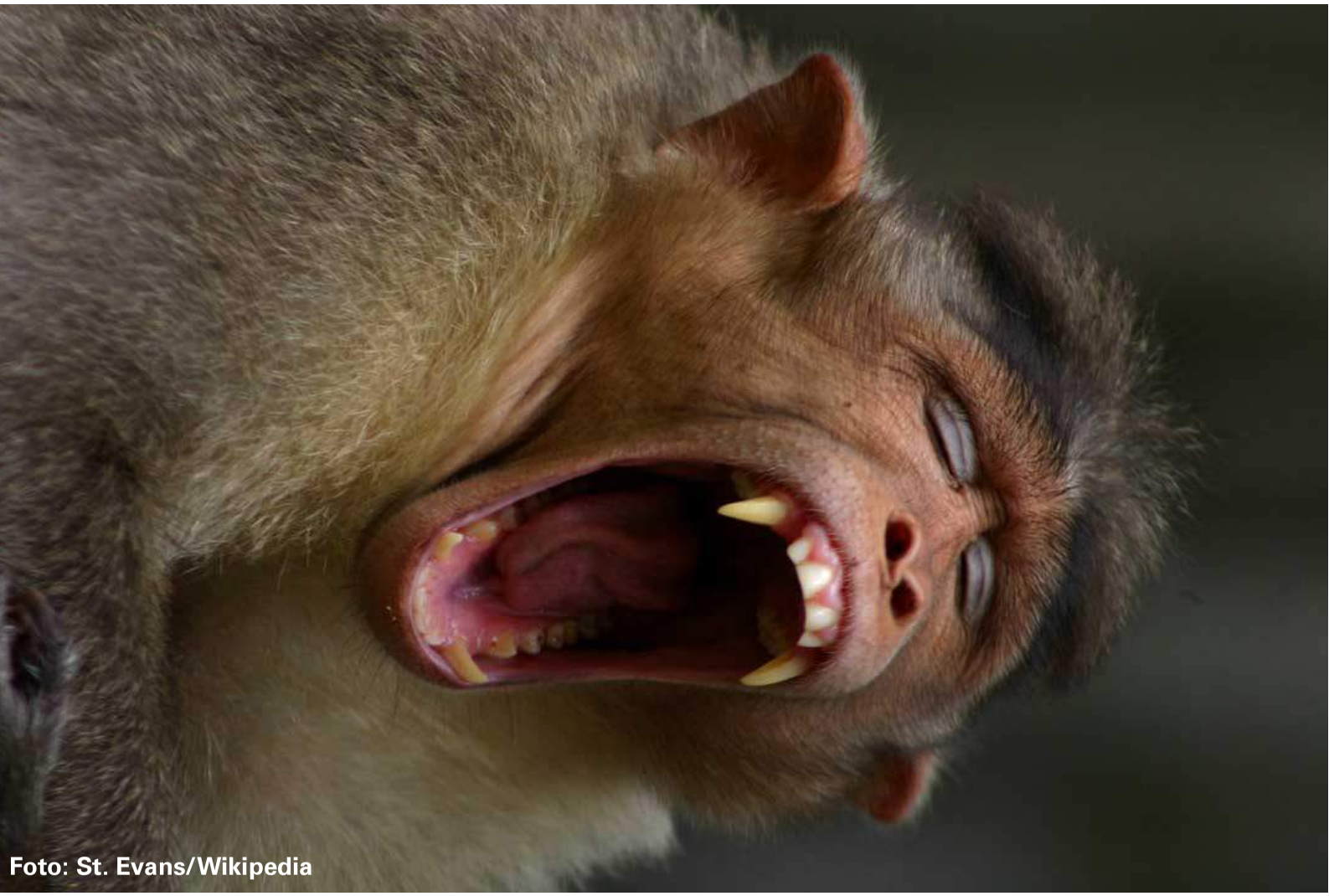


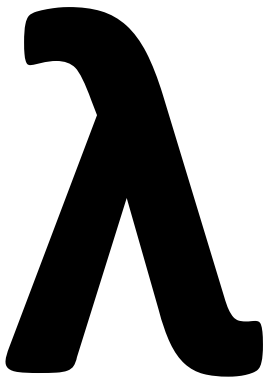
Foto: St. Evans/Wikipedia

Value Objects for Java

?


jax
®


ORACLE®




Java

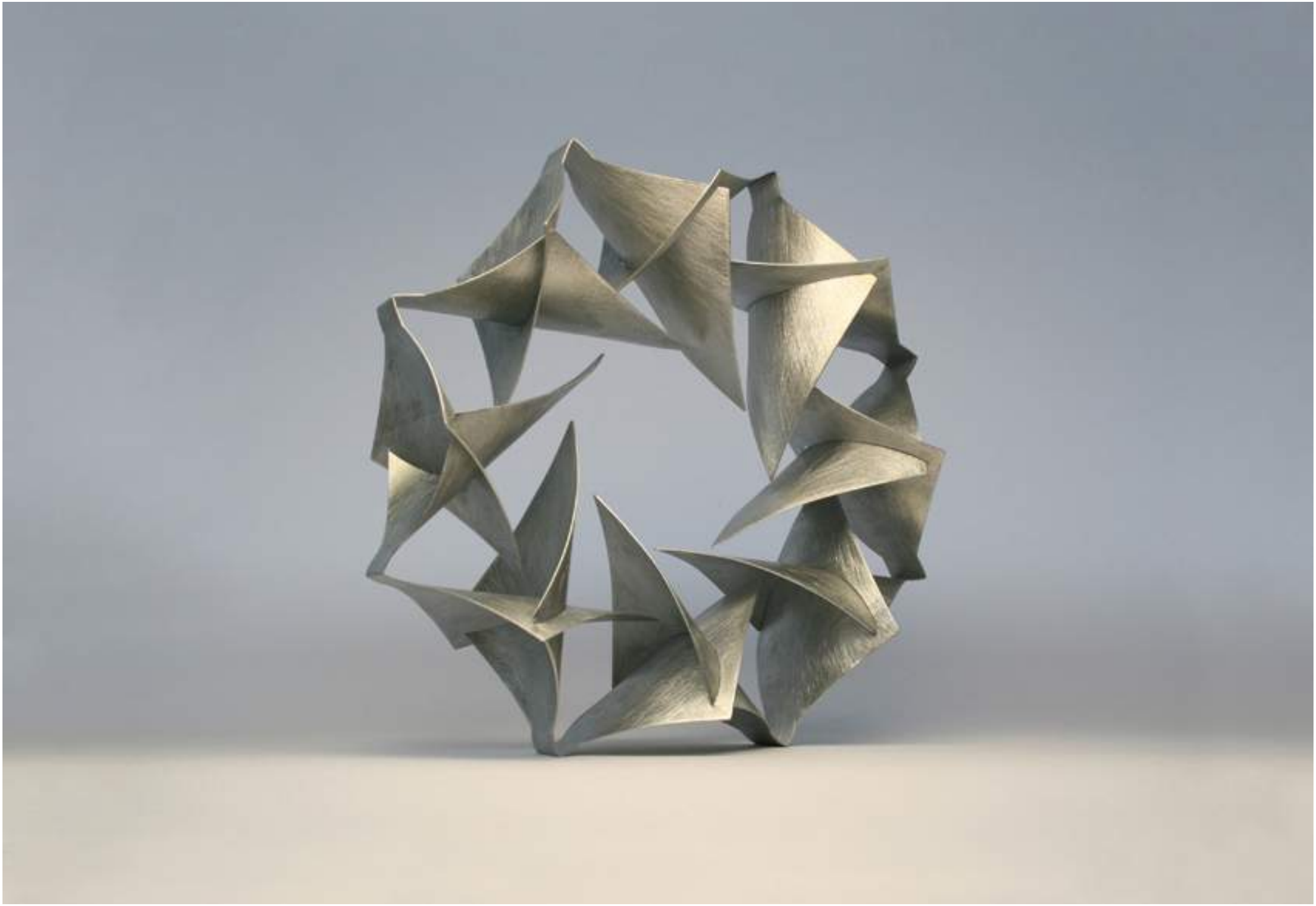

9


10

“The next big thing for java are value types!”

?


Java



Identität

Foto: Th.omas G.Gra/Wikipedia

Foto: Pixabay

Foto: Bernd Schwabe in Hannover/Wikipedia

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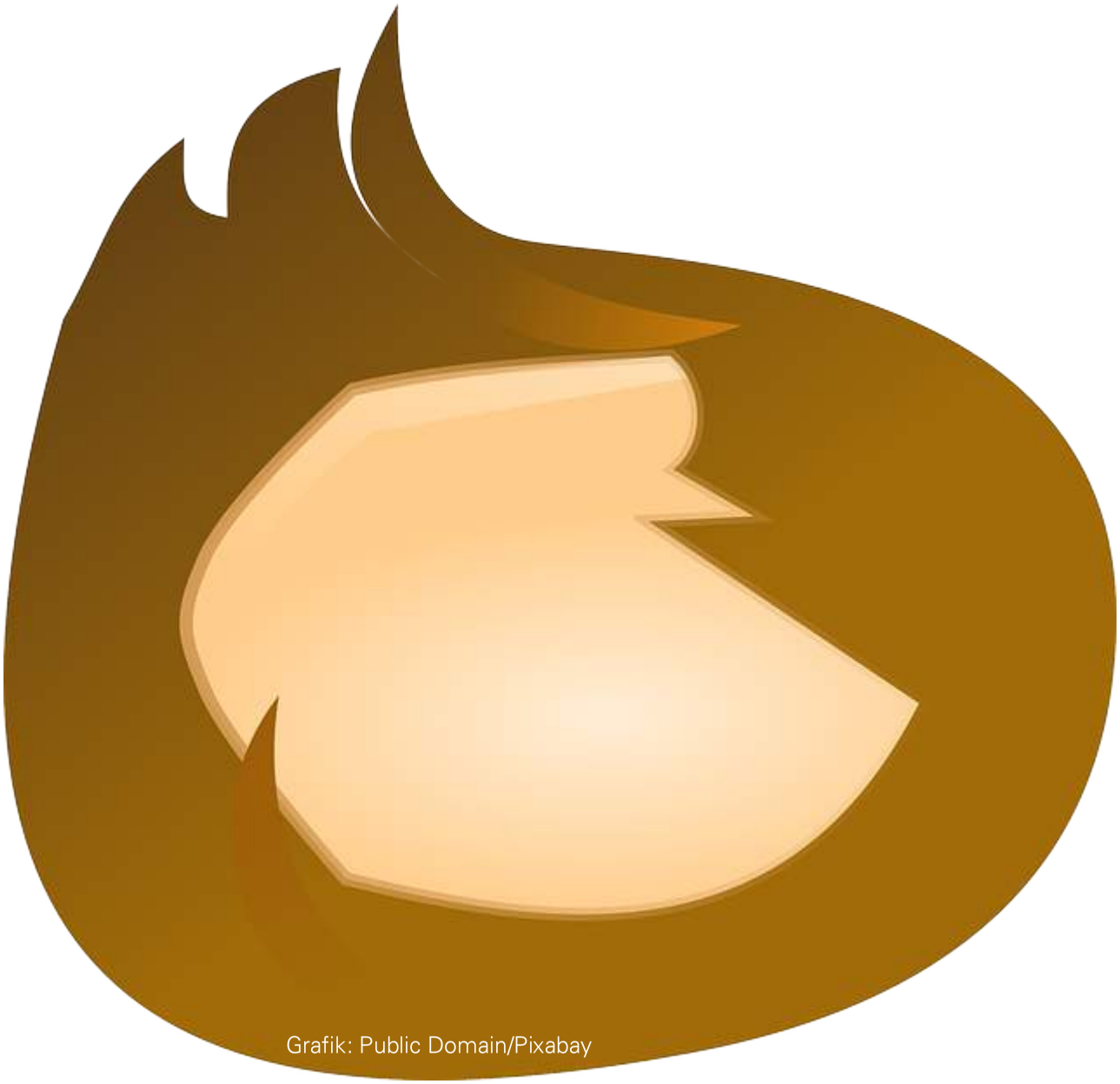
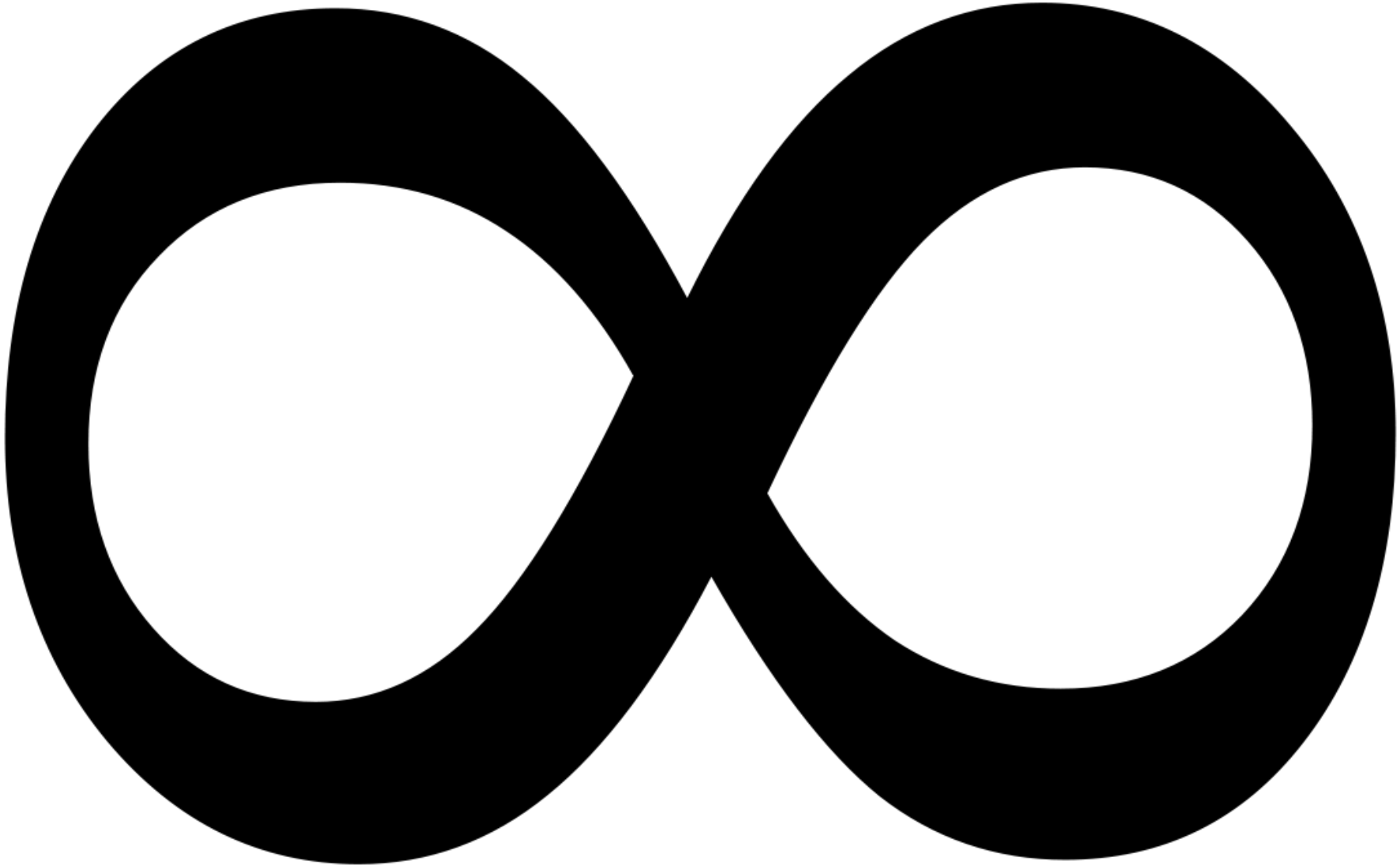
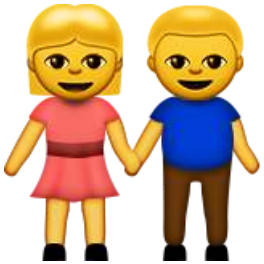


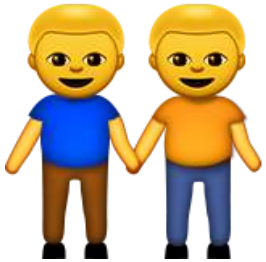
Grafik: Public Domain/Pixabay

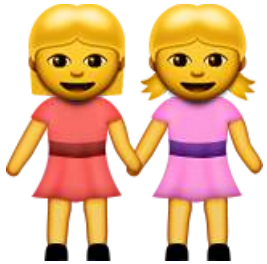

Foto: A. Markiewicz

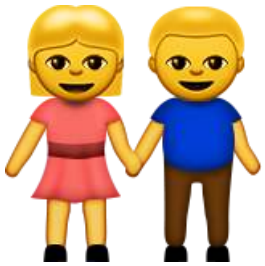


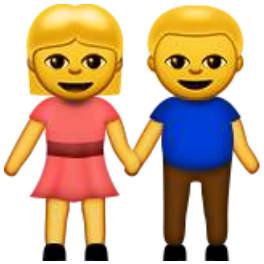
Beispiel

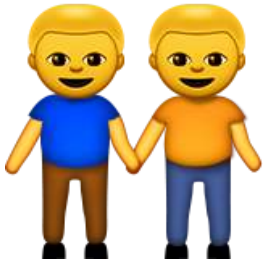












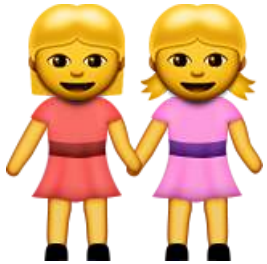


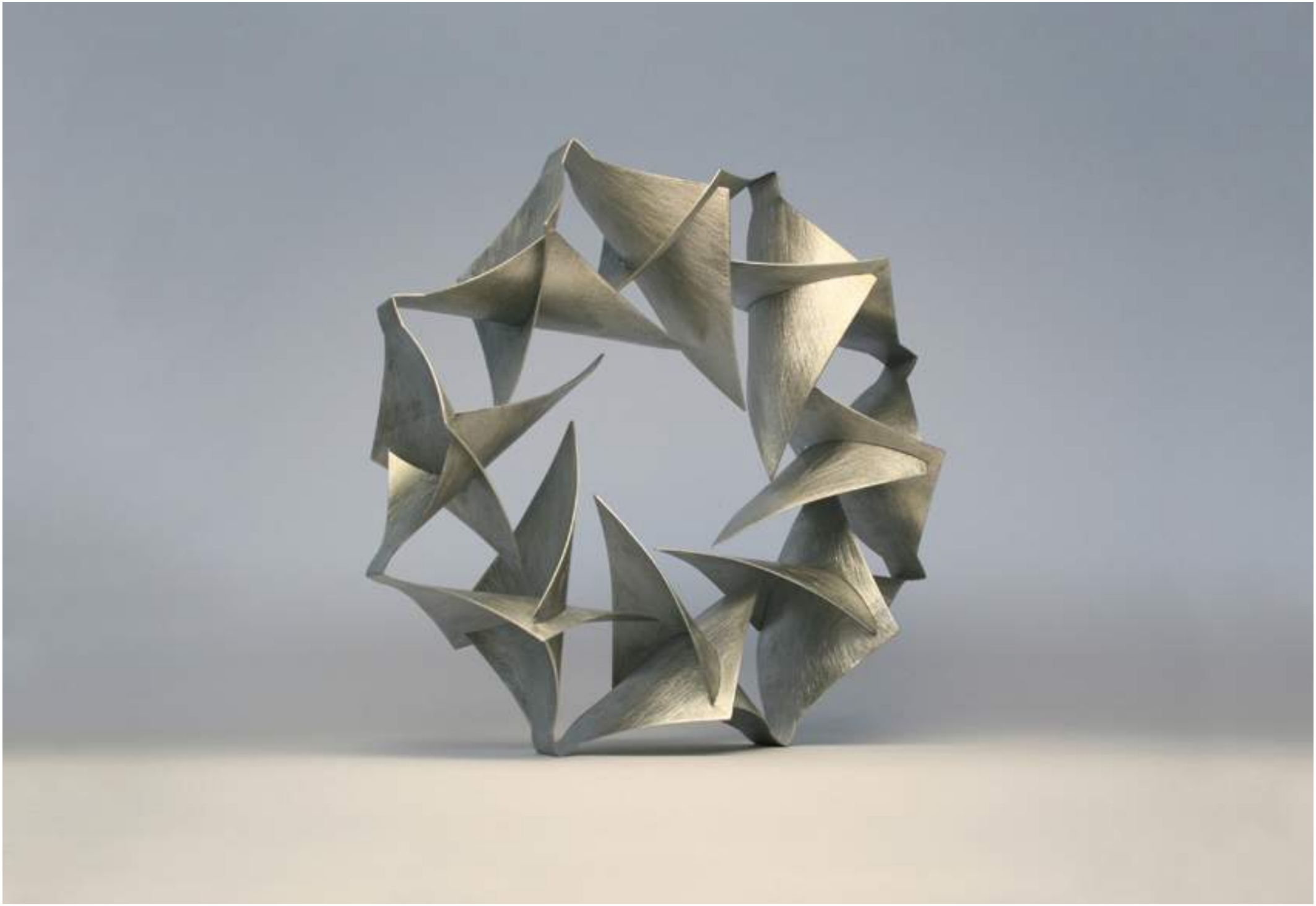




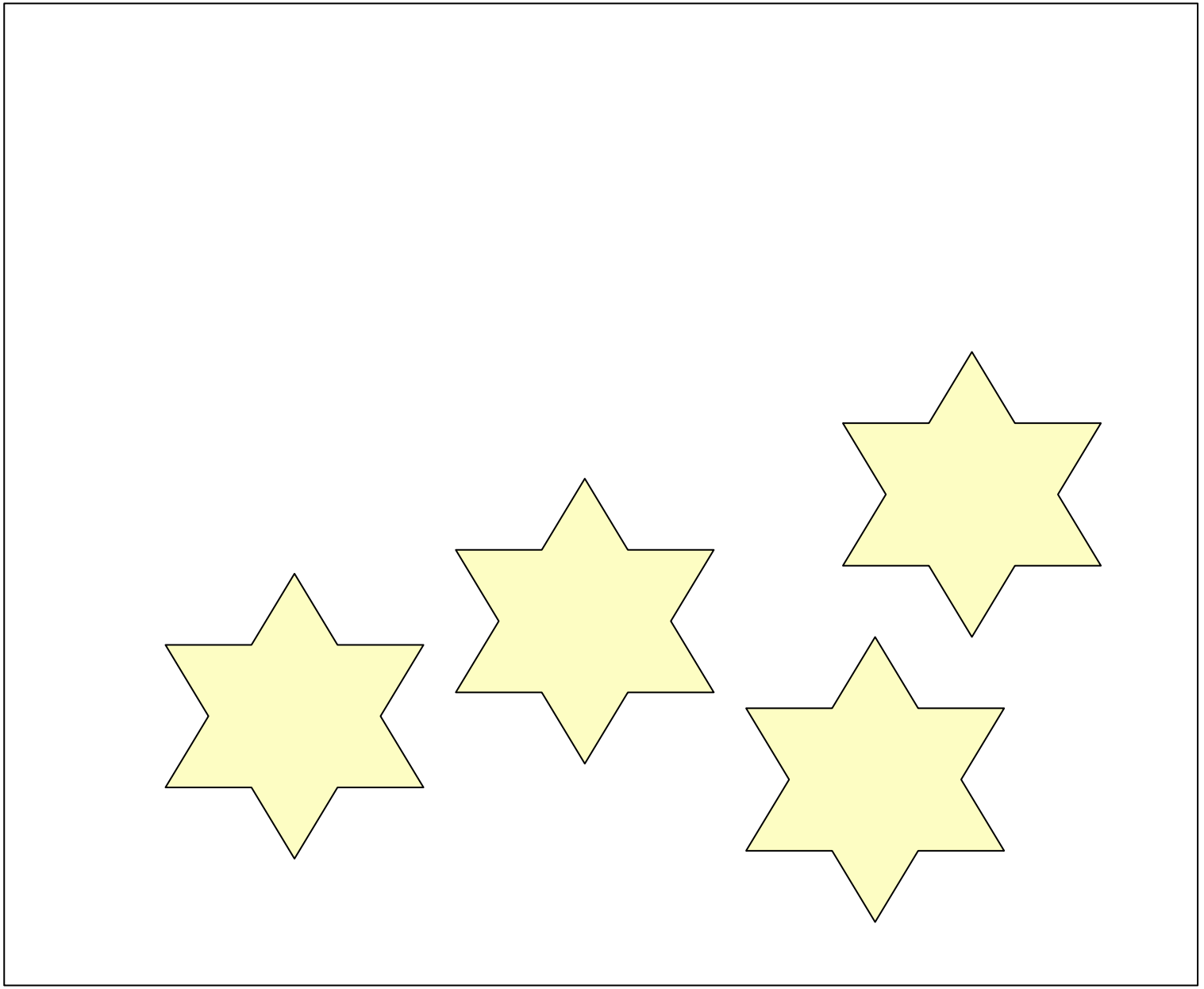

Foto: Bibi Saint-Pol/Wikipedia

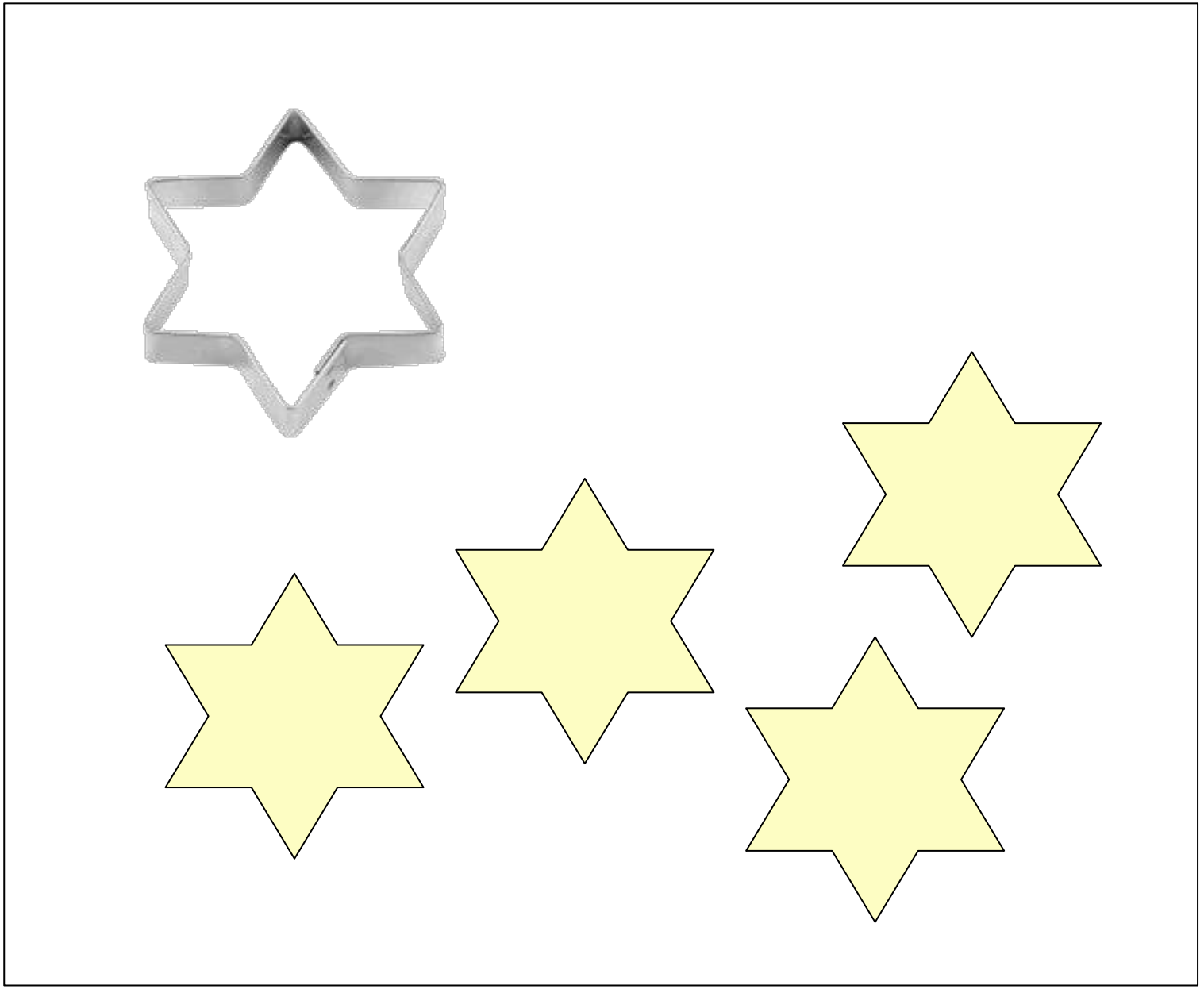
Foto: Gemeinfrei/Wikipedia

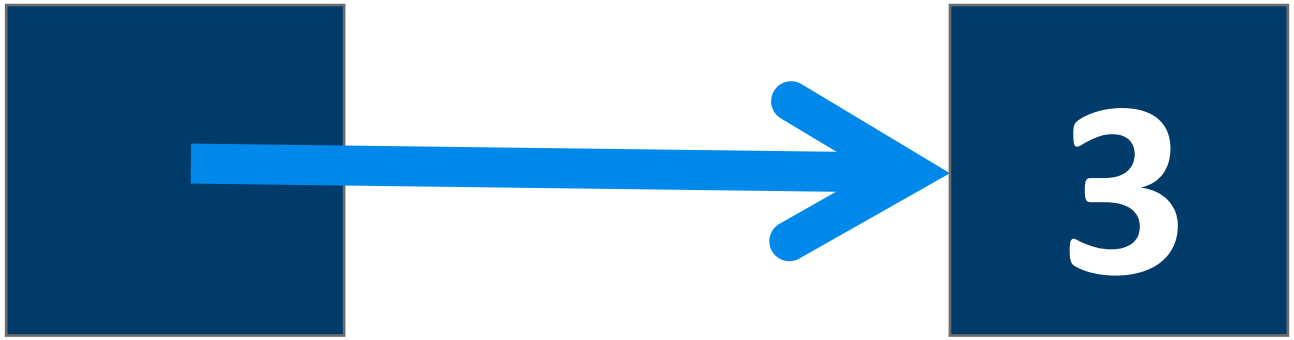

Java




EINSCHULUNG
2014



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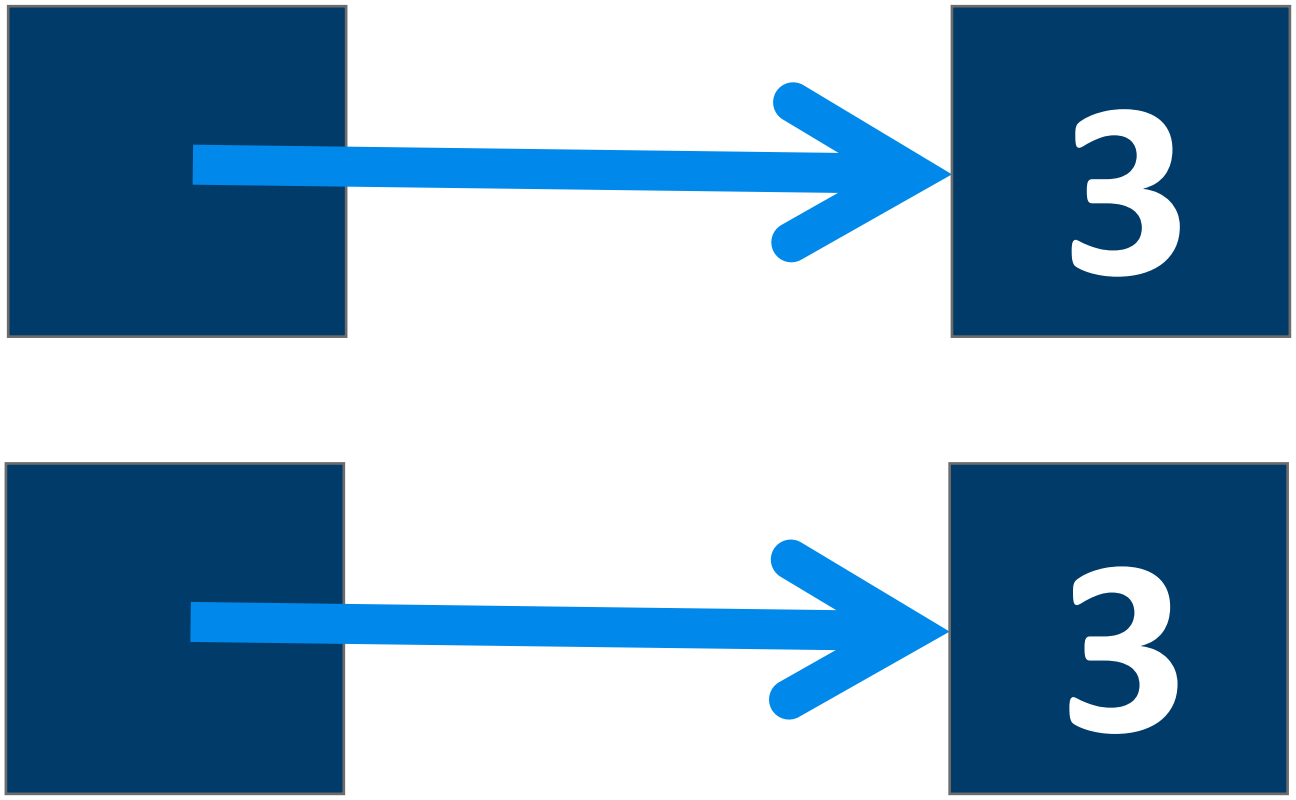
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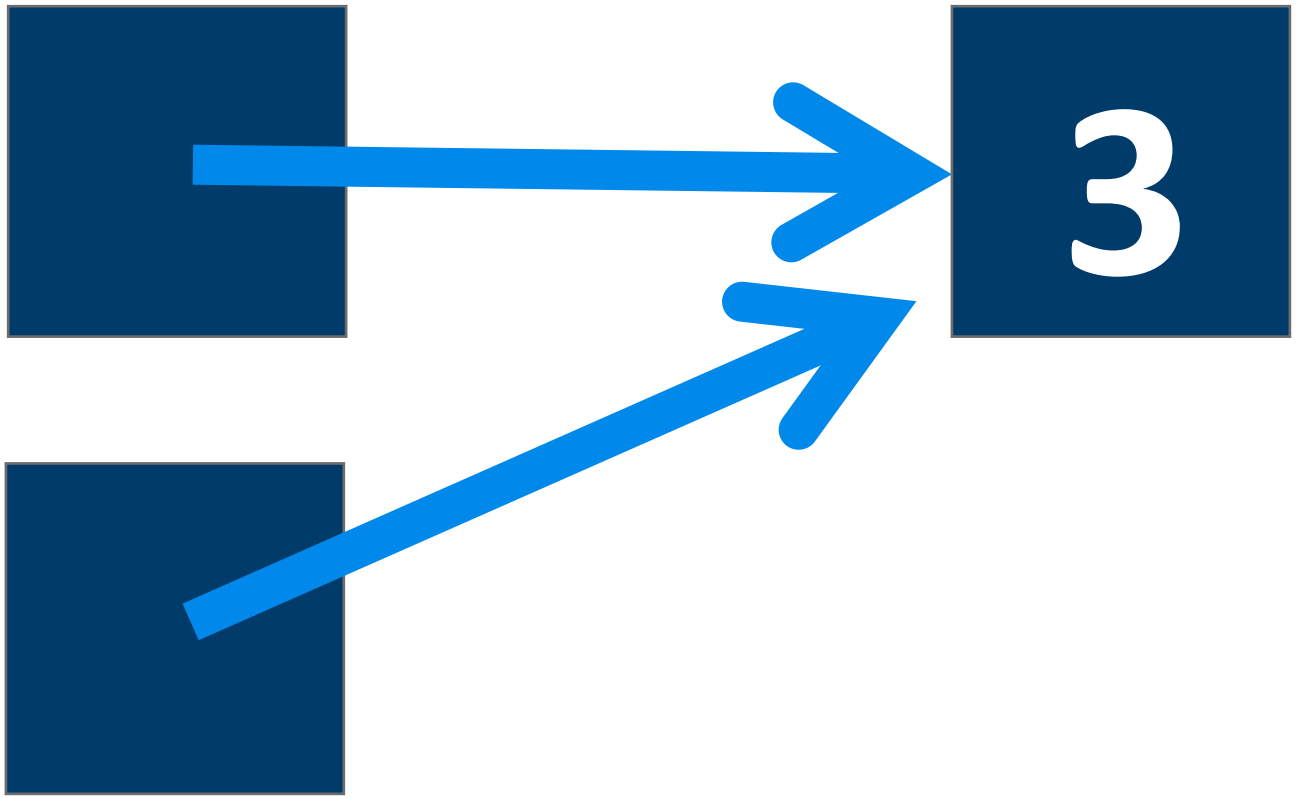
3


3

Wo lebt eigentlich ein Objekt?


compile time

run time

Wo lebt eigentlich ein Objekt?

Foto: Public Domain/Pixabay

3

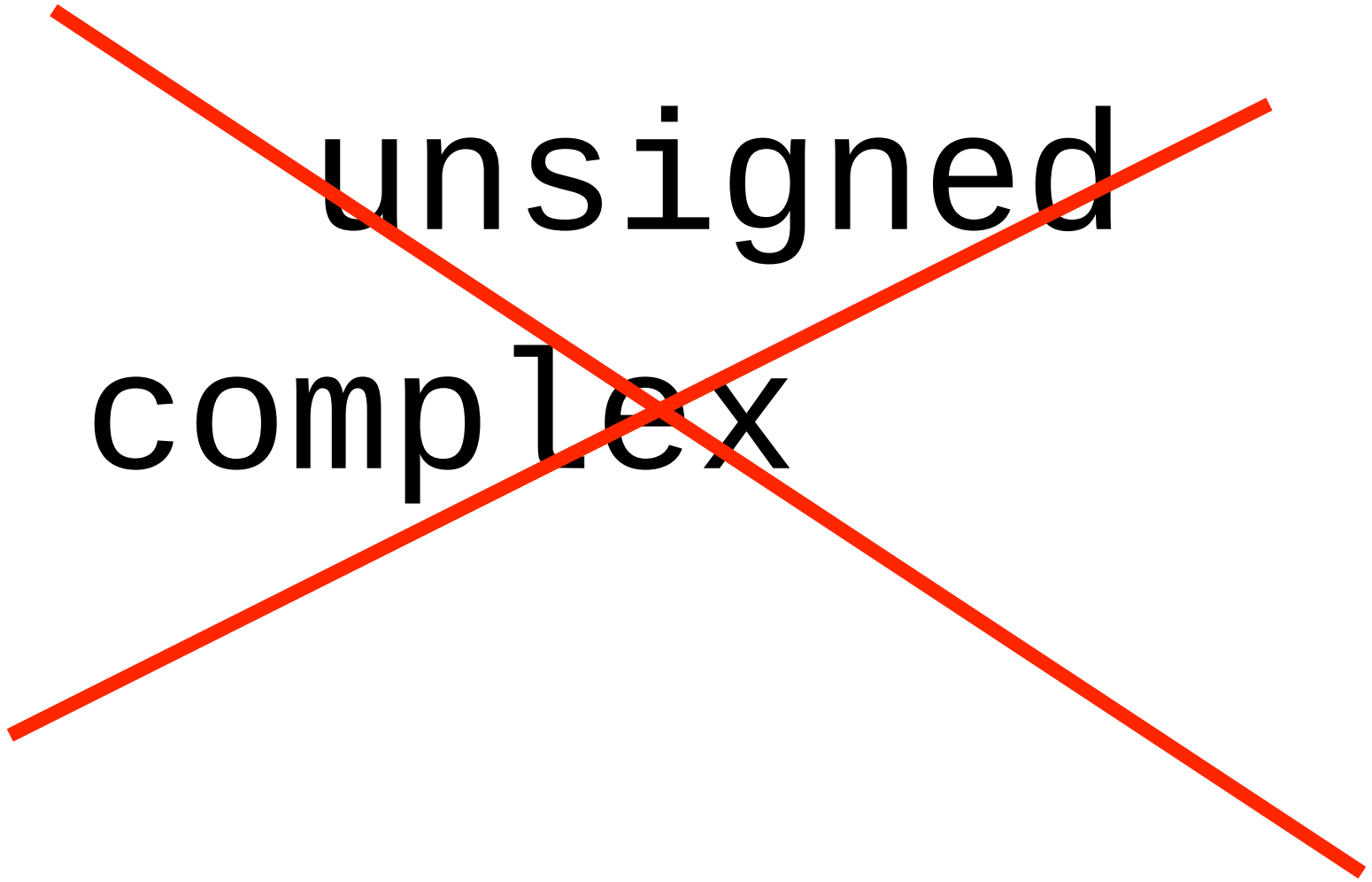

3

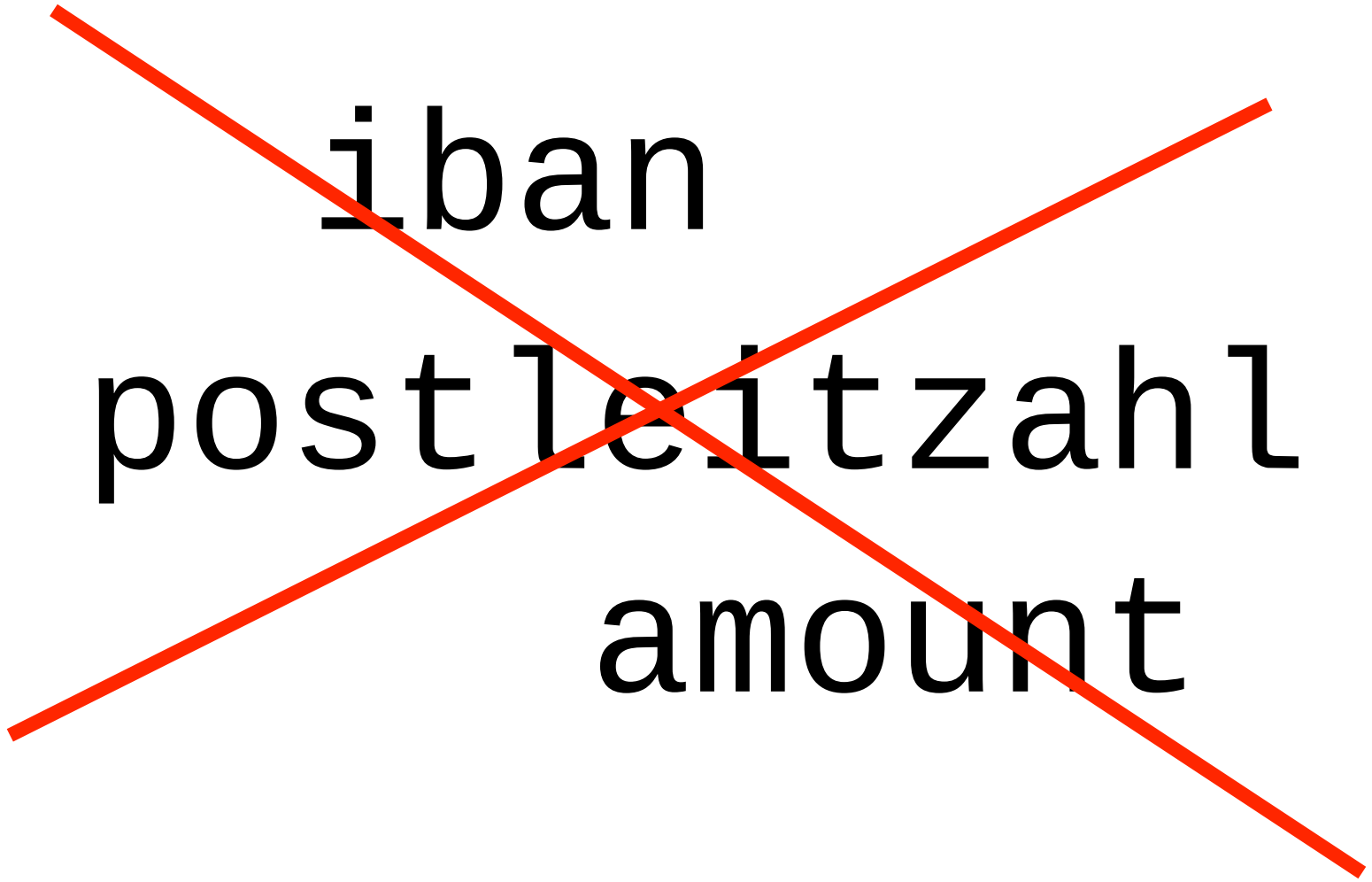

3

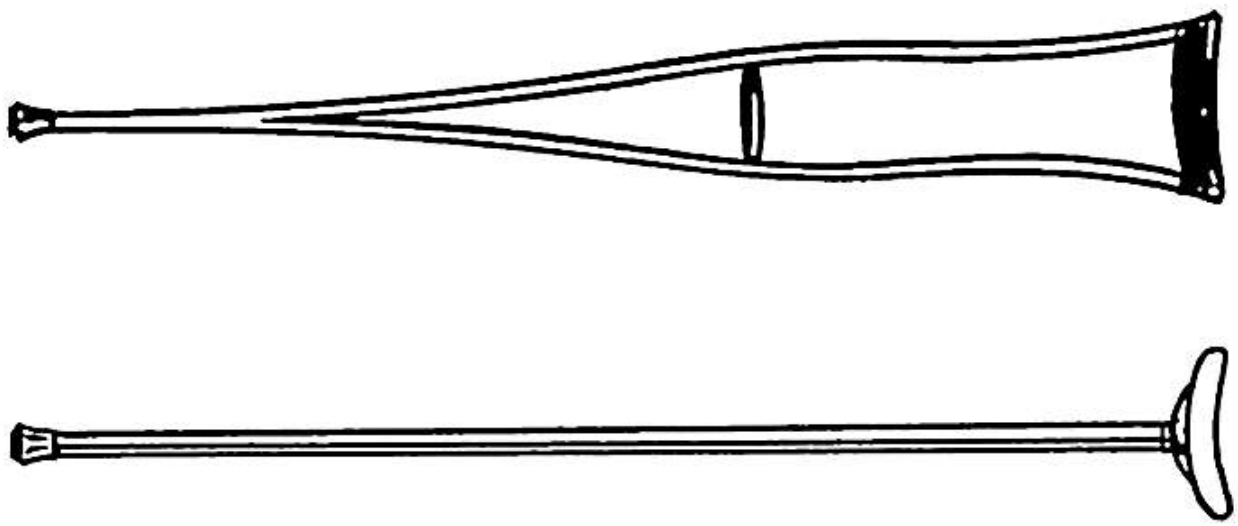
int double

boolean

float


unsigned
complex


iban
postleitzahl
amount



Grafik: Gemeinfrei/Wikipedia

value-based class

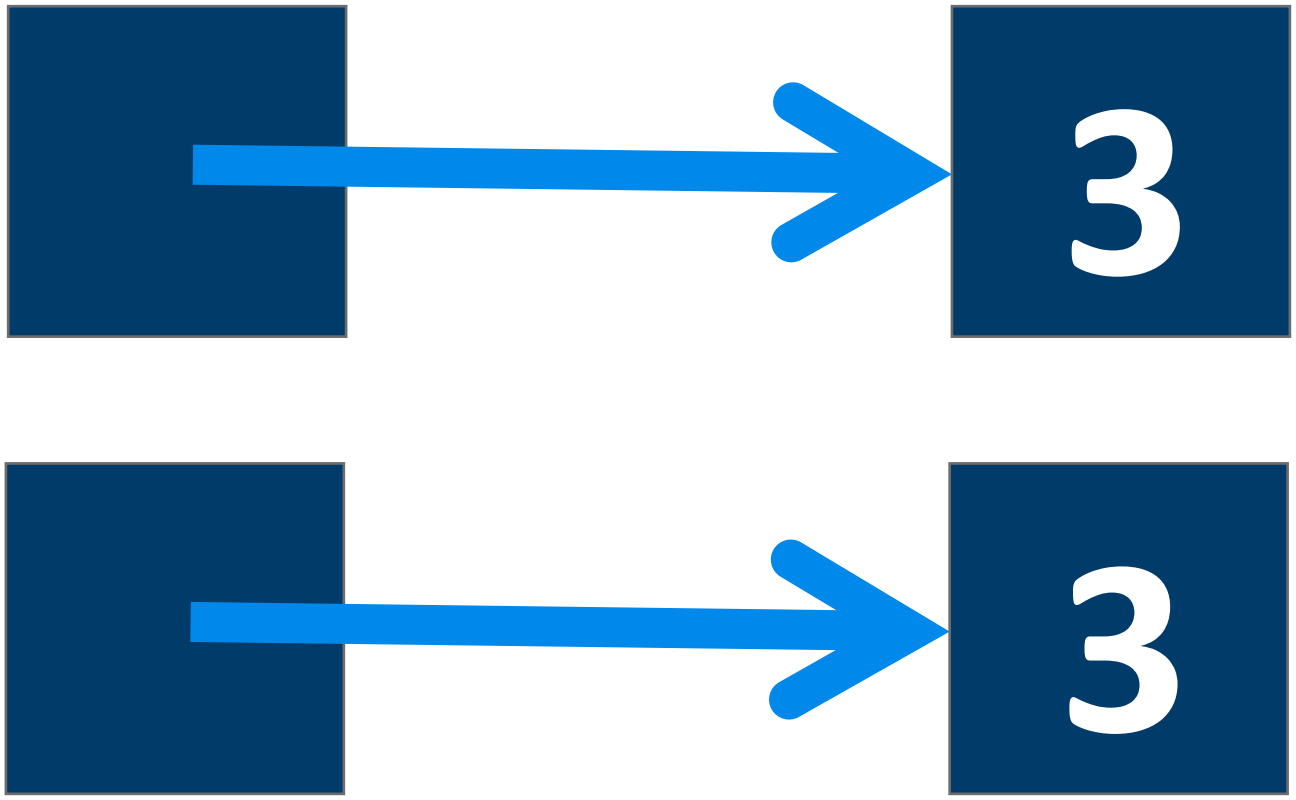
Nur finale Felder

Nur sondierende Methoden

equals()
hängt nicht von
Identität ab

value-based class


ABER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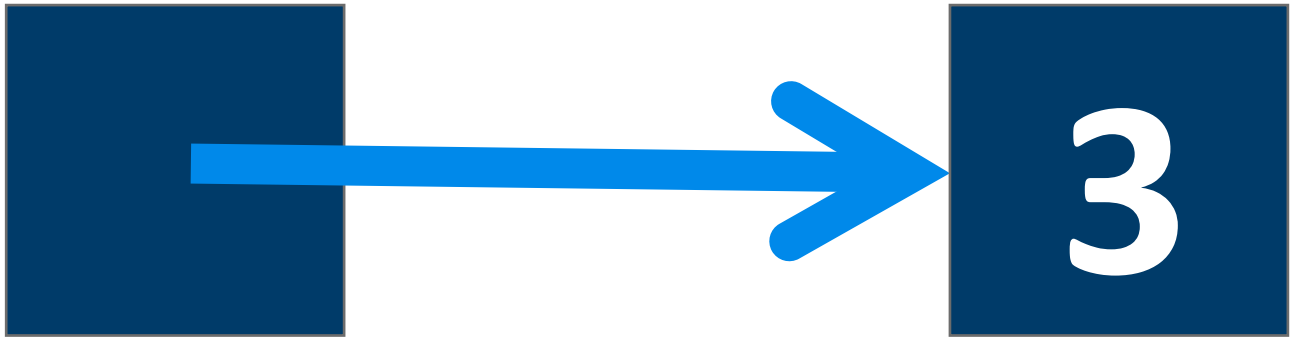
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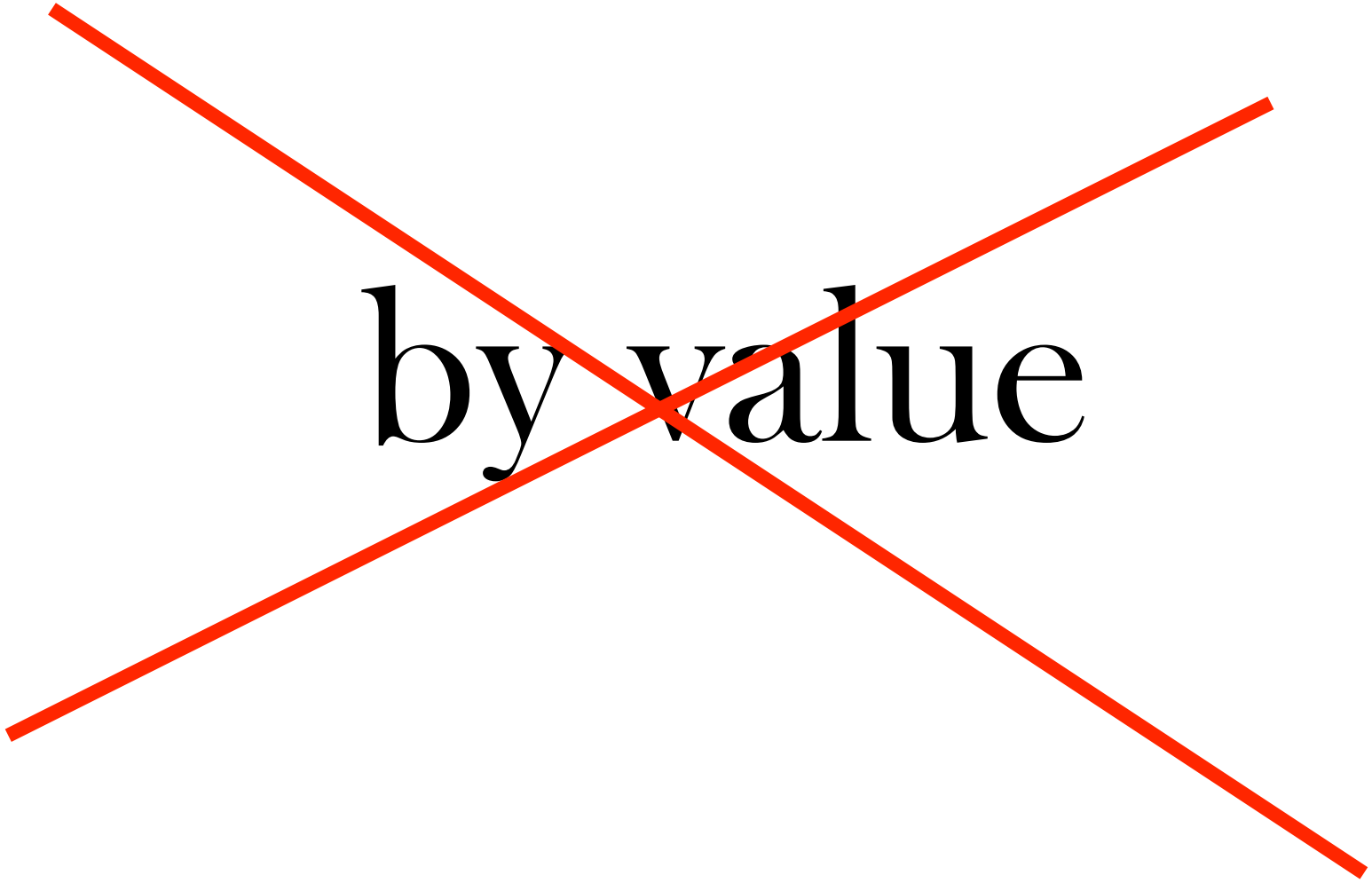
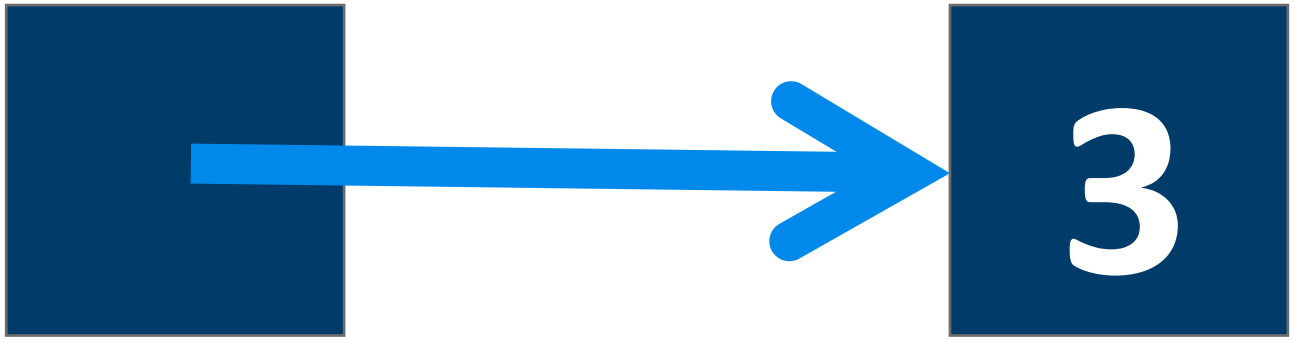

by value

by reference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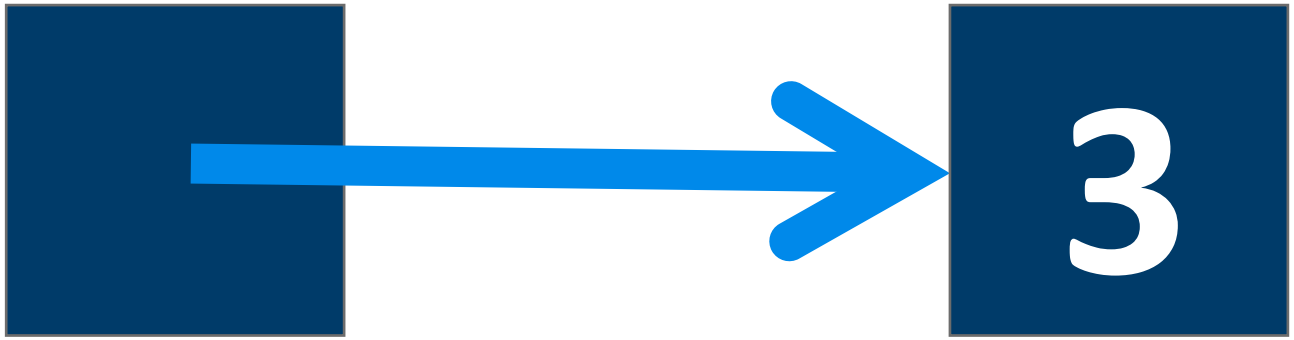
Speicher * 2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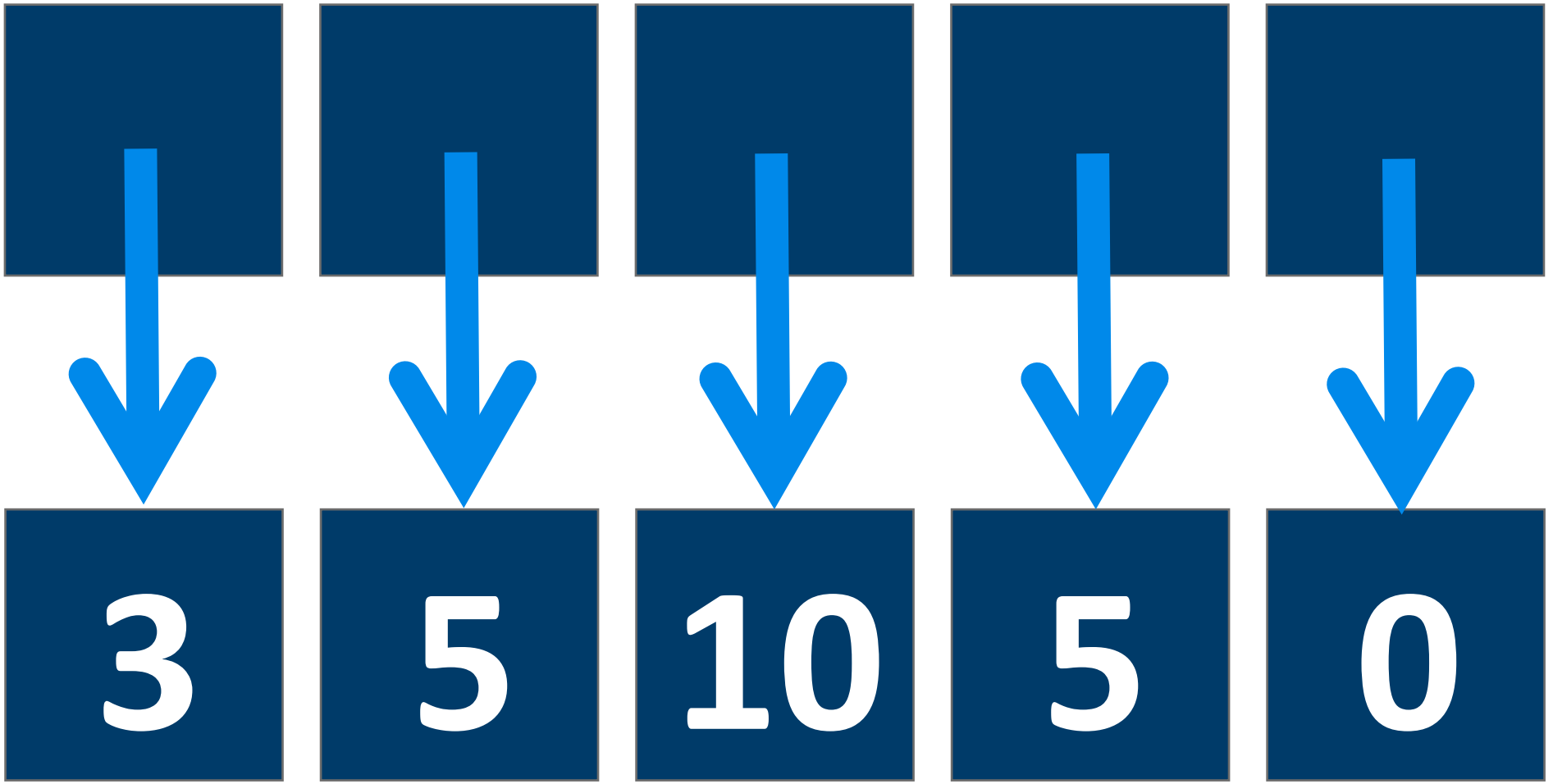
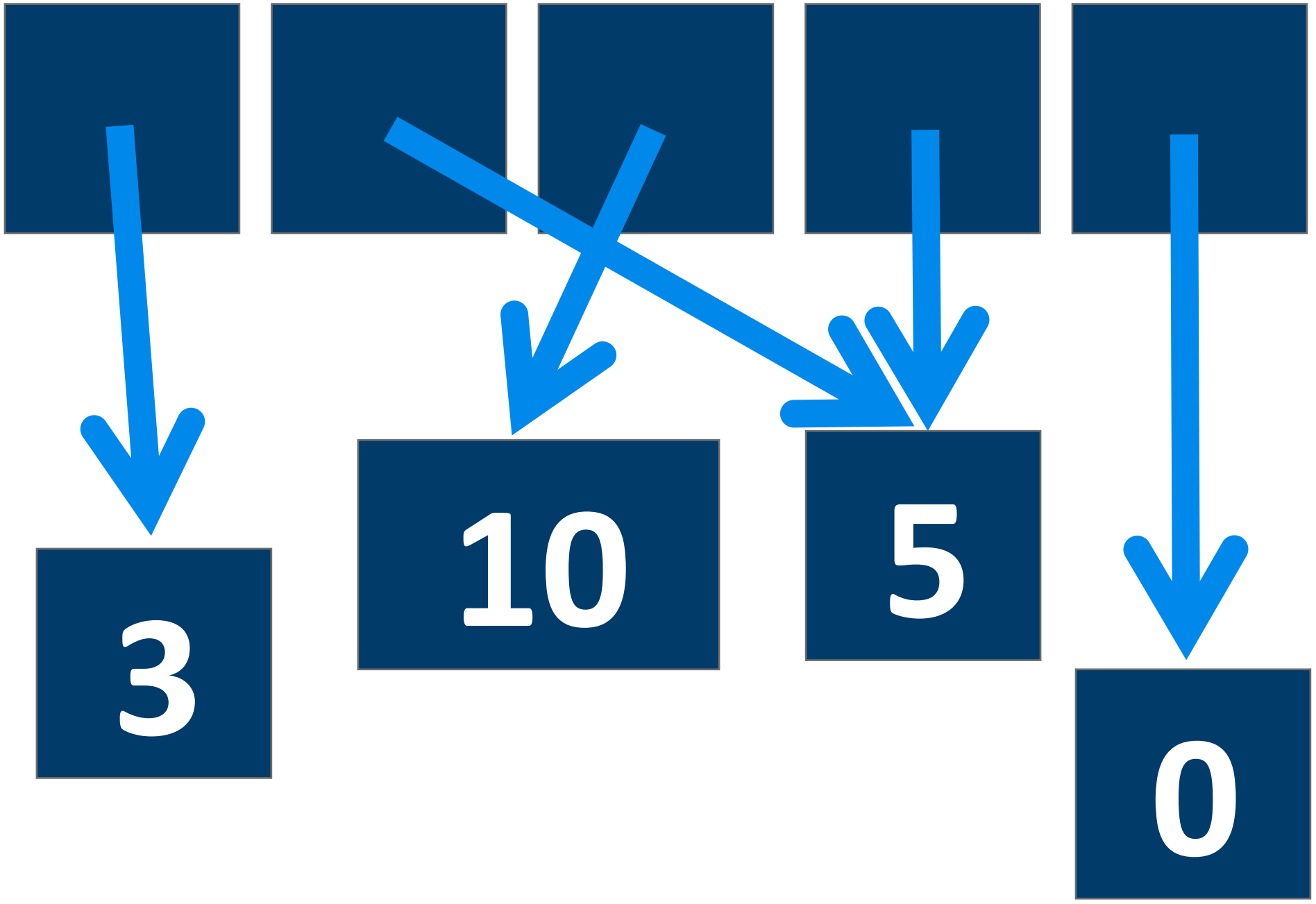
3


int[]


3
5
10
5
0

Object[]


3
5
10
5
0

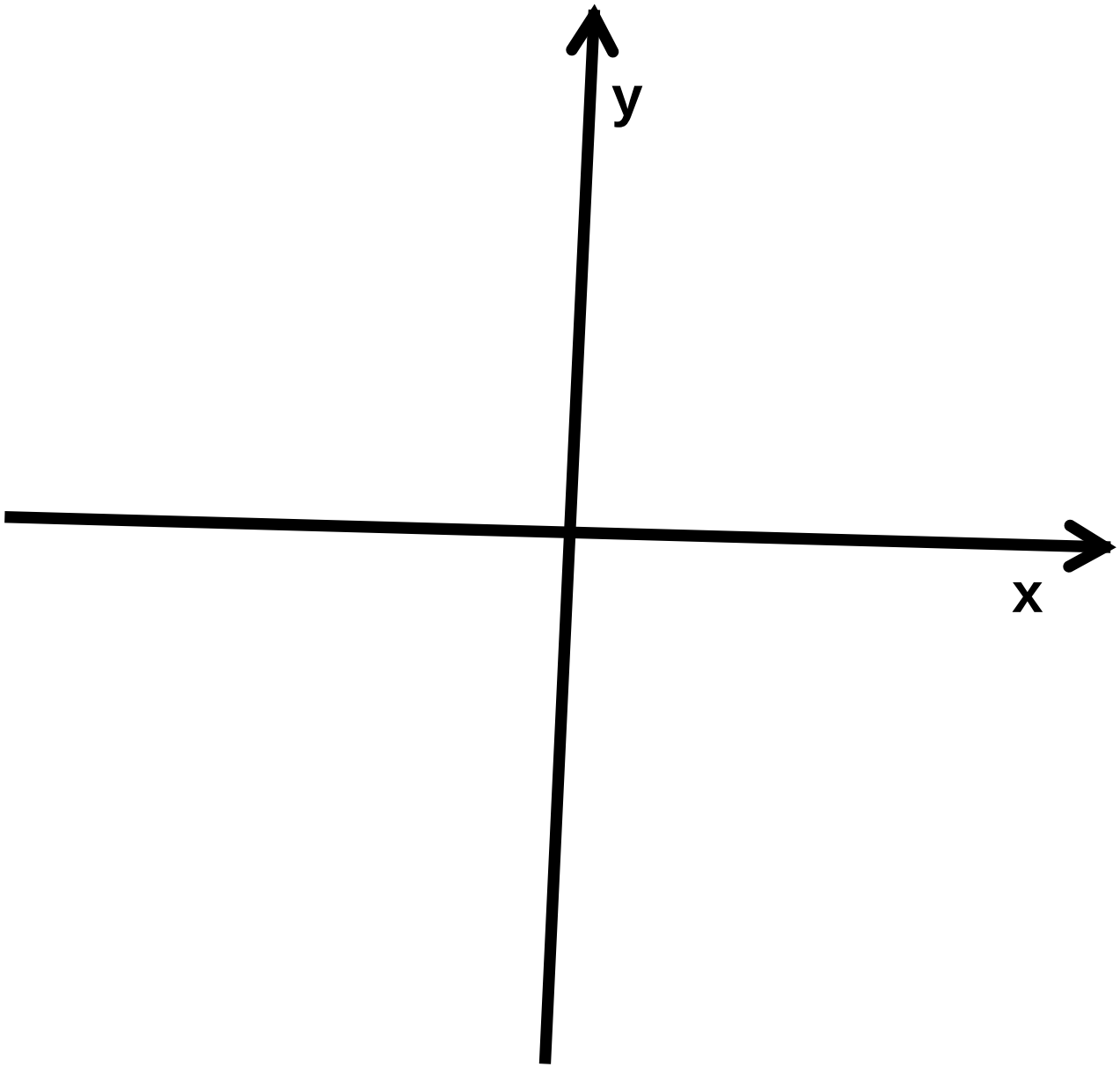

3
10
5
0

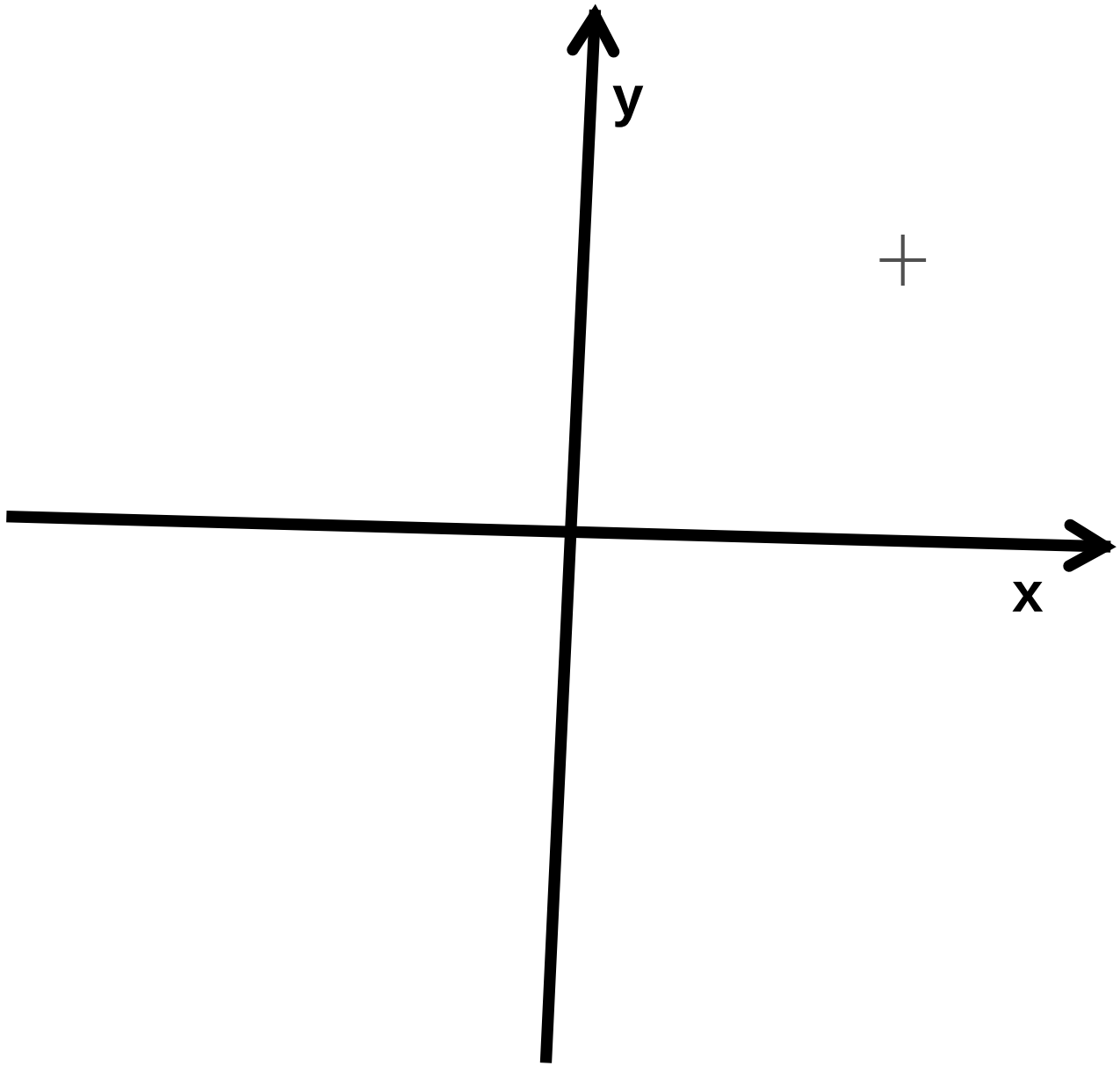
Die Antwort

Foto: Donald24/Wikipedia

“Works like an int – codes like a class”

Beispiel


y
x


y
x

$$(x, y)$$


Java


9


10

Bild: Gemeinfrei

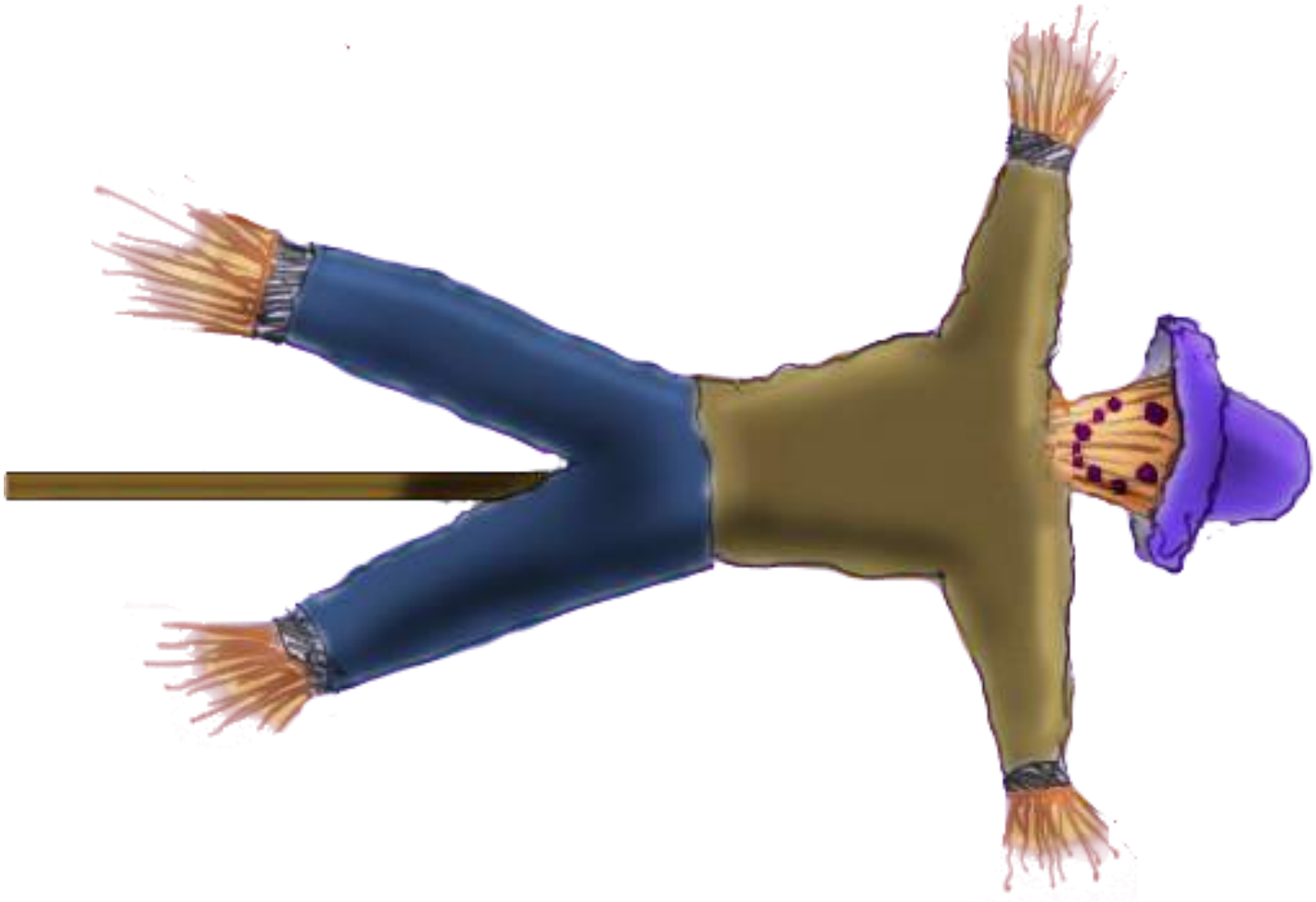


Bild: Rursusi/Wikipedia

```
final __ByValue class Point {
  private final int _x;
  private final int _y;

  public Point(int x, int y) {
    _x = x;
    _y = y;
  }

  public boolean equals(Point other)
    return _x = other._x
      && _y = other._y;
}
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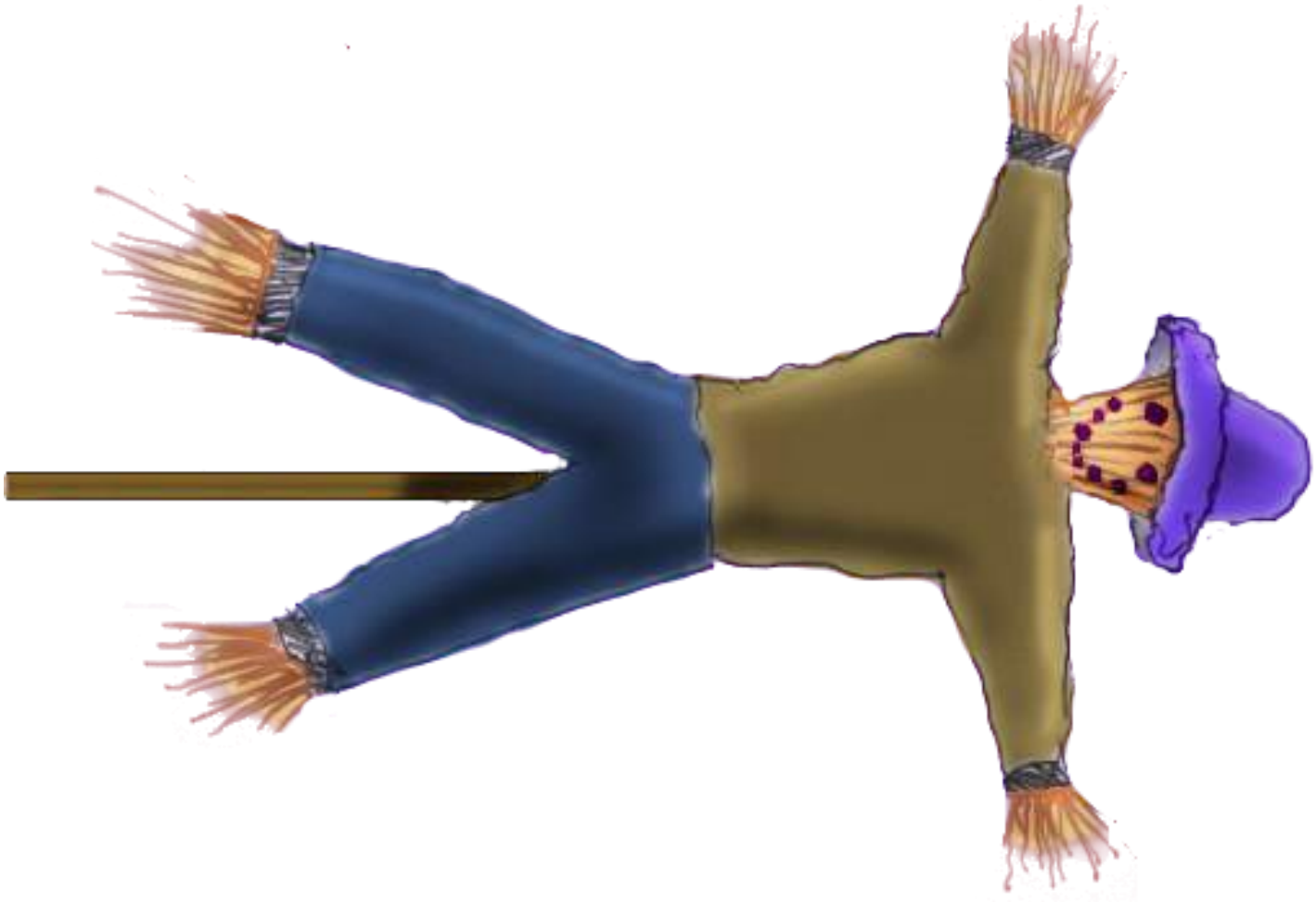

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```

“Works like an int –
codes like a class”

“Works like an int –

codes like a class”

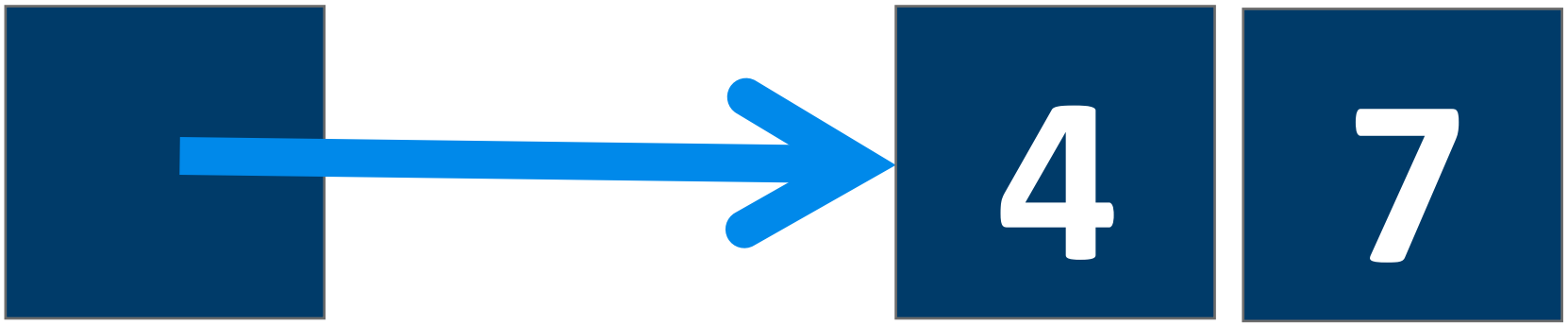
```
Point p = __MakeValue(4, 7);
```

```
Point p = __MakeValue(4, 7);
```

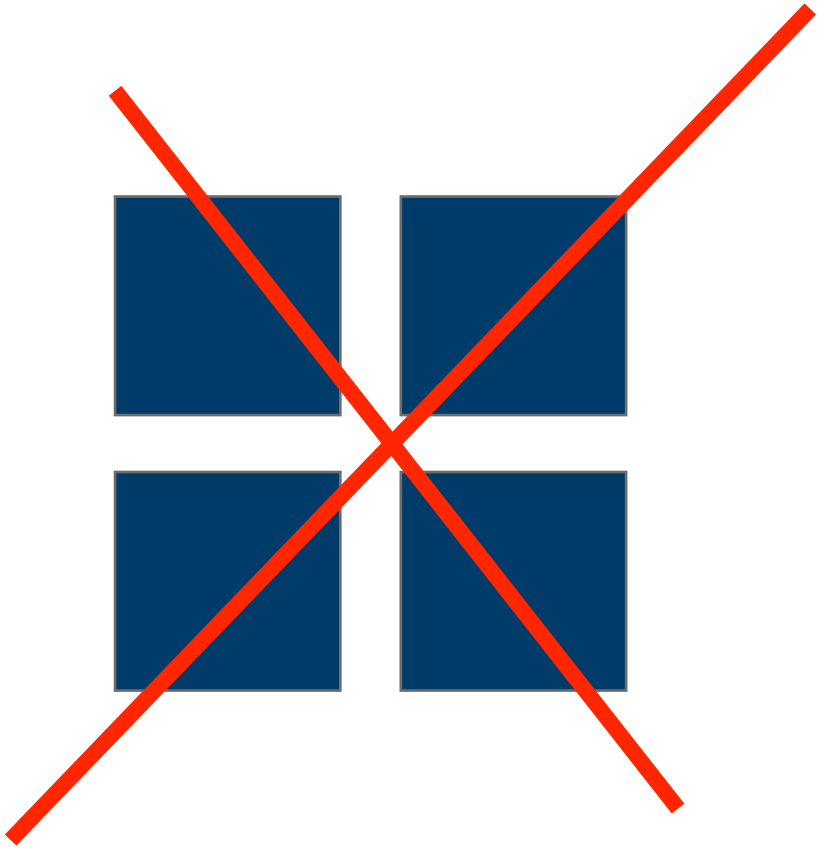
```
Point p = new Point(4, 7);
```

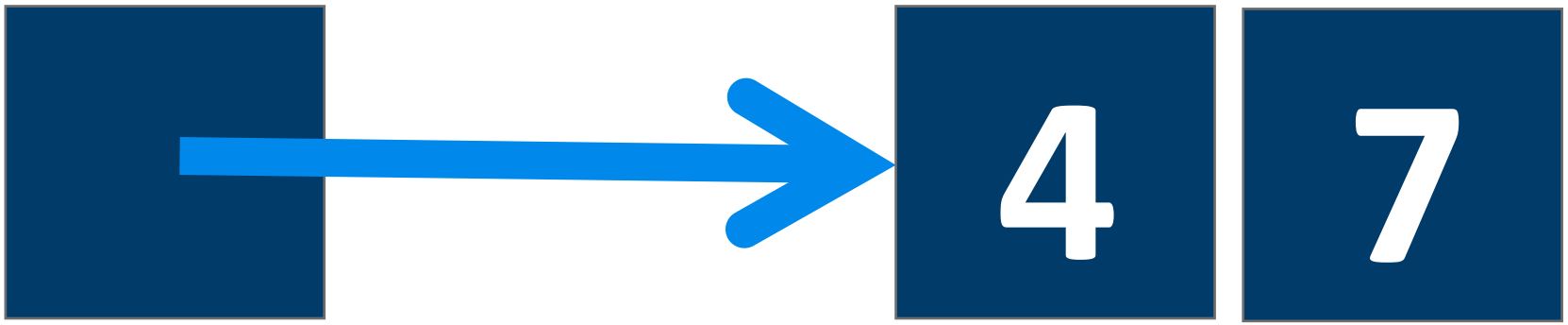
```
Point p = Point(4, 7);
```

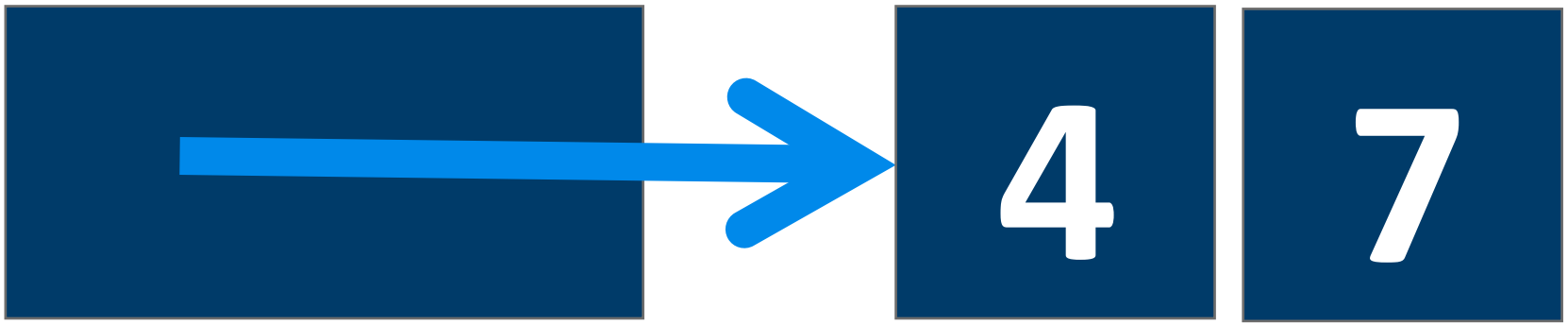
```
Point p = (4, 7);
```


4
7


47




4
7


4
7


47

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Point p = __MakeValue(4, 7);
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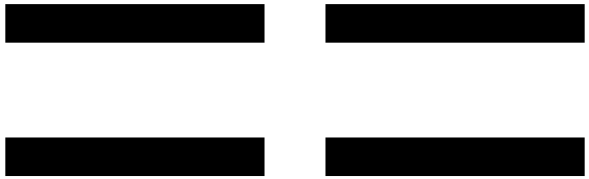
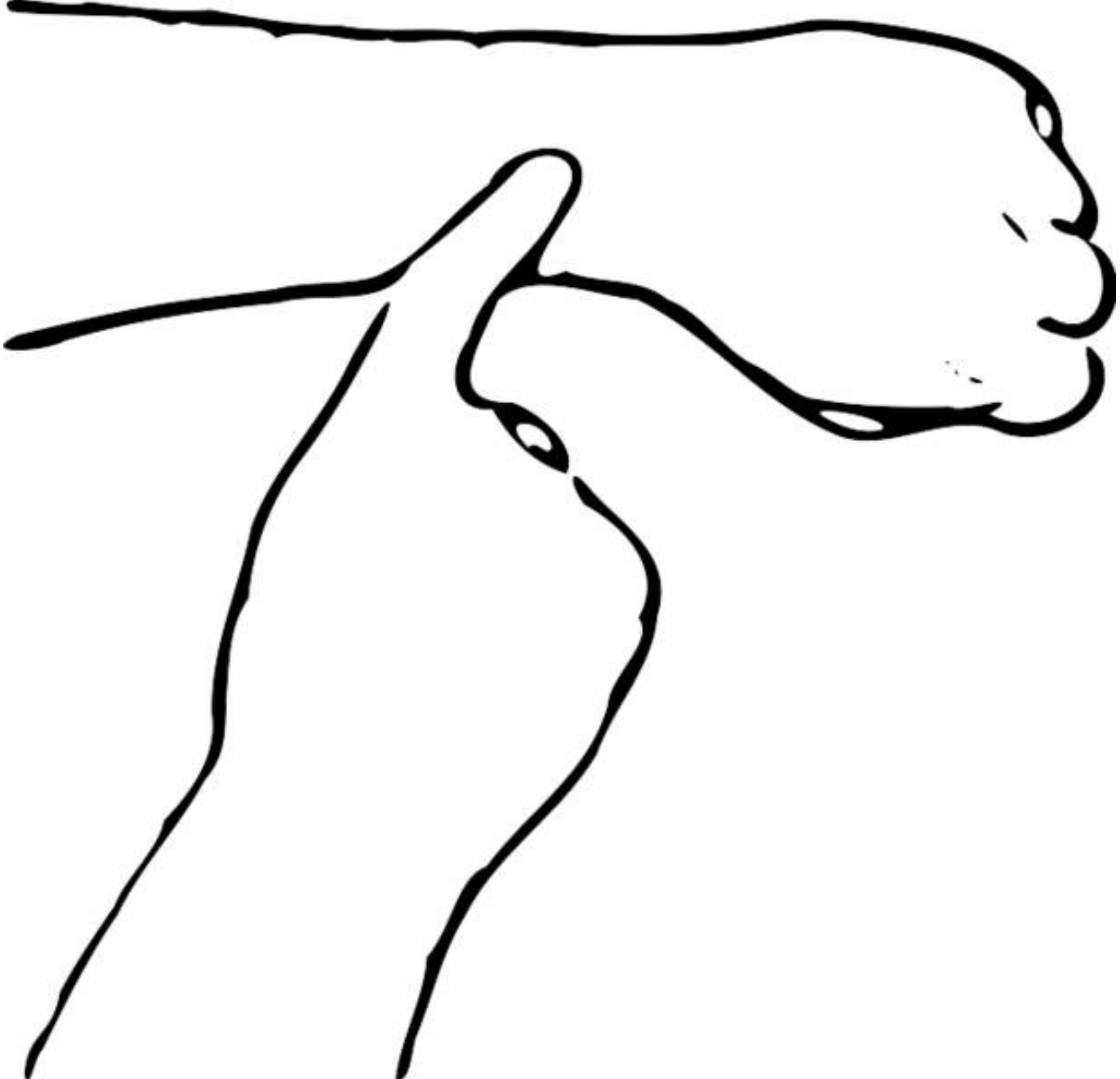


Default-Wert




160

Was gibts noch?

ArrayList<Point>

ArrayList<int>

ArrayList<Point>

Zum Schluss

Bild: Gemeinfrei

project valhalla

Feedback-Bogen

Warum hat dieser Vortrag Ihre Erwartungen erfüllt?

Ihre Hinweise für den Referenten hinsichtlich des Vortragsstils:

Ihre Hinweise für den Referenten hinsichtlich der fachlichen Kompetenz:


SENDESCHLUß

HENNING SCHWENTNER

hs@wps.de

@hschwentner