

Programmation Orientée Objet (OBJET)

Modèle mémoire en Java

2 – Exemple

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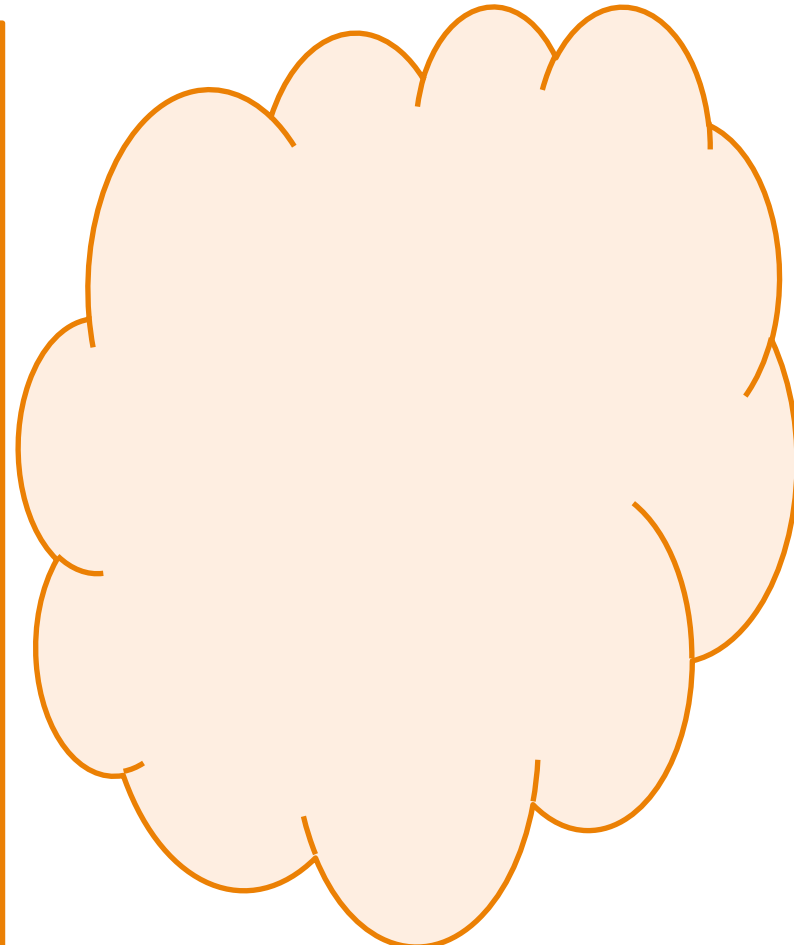
Modèle mémoire Java : exemple

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    var += 2;  
    Point2D p1 = new Point2D(5,5);  
}  
  
public static void main(String[] args) {  
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    System.out.println("i vaut: "+i);  
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}
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Affichage console



Pile



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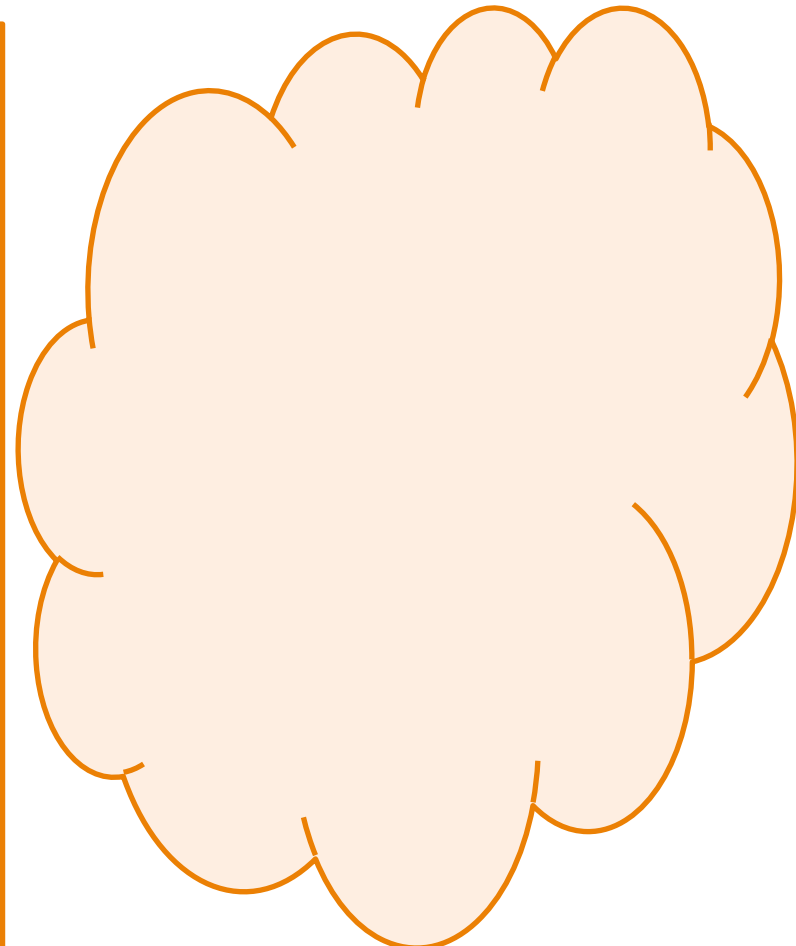
Affichage console



main

i

Pile



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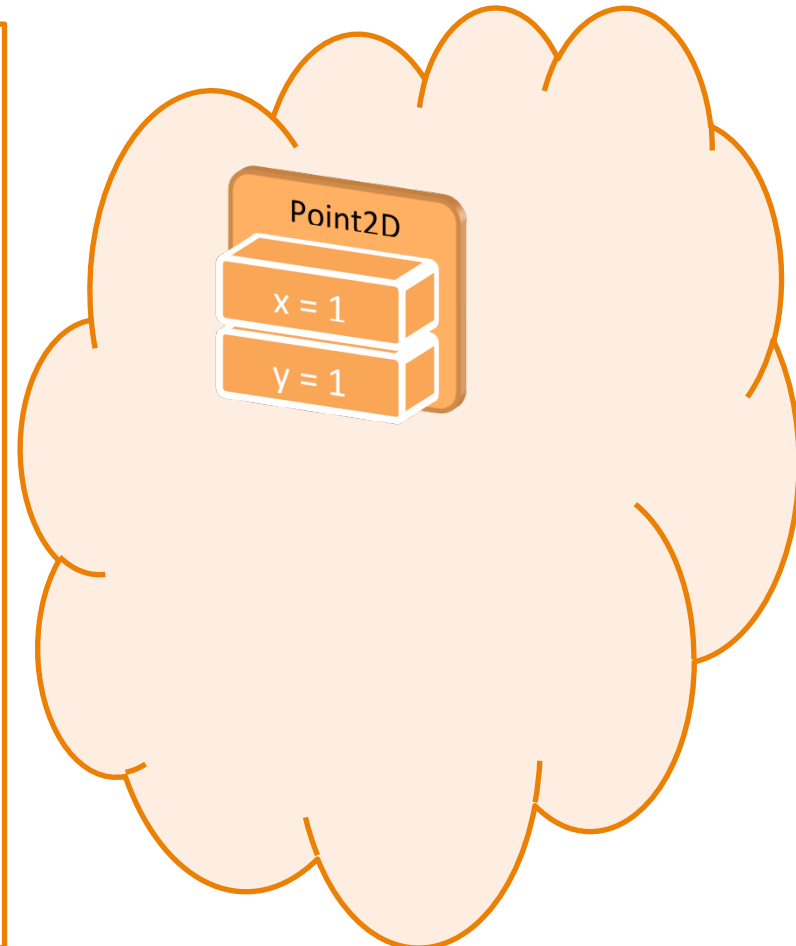
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main

i 0
p1

Pile

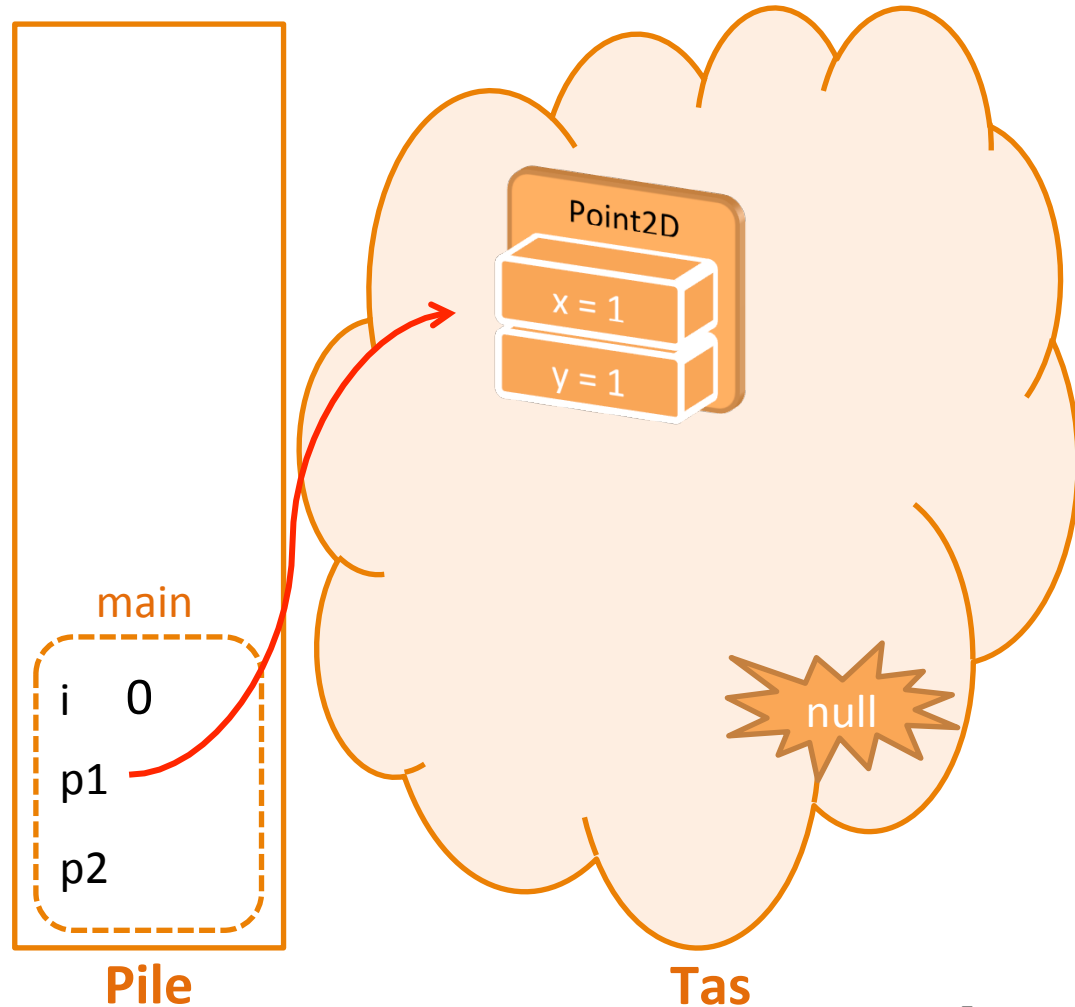


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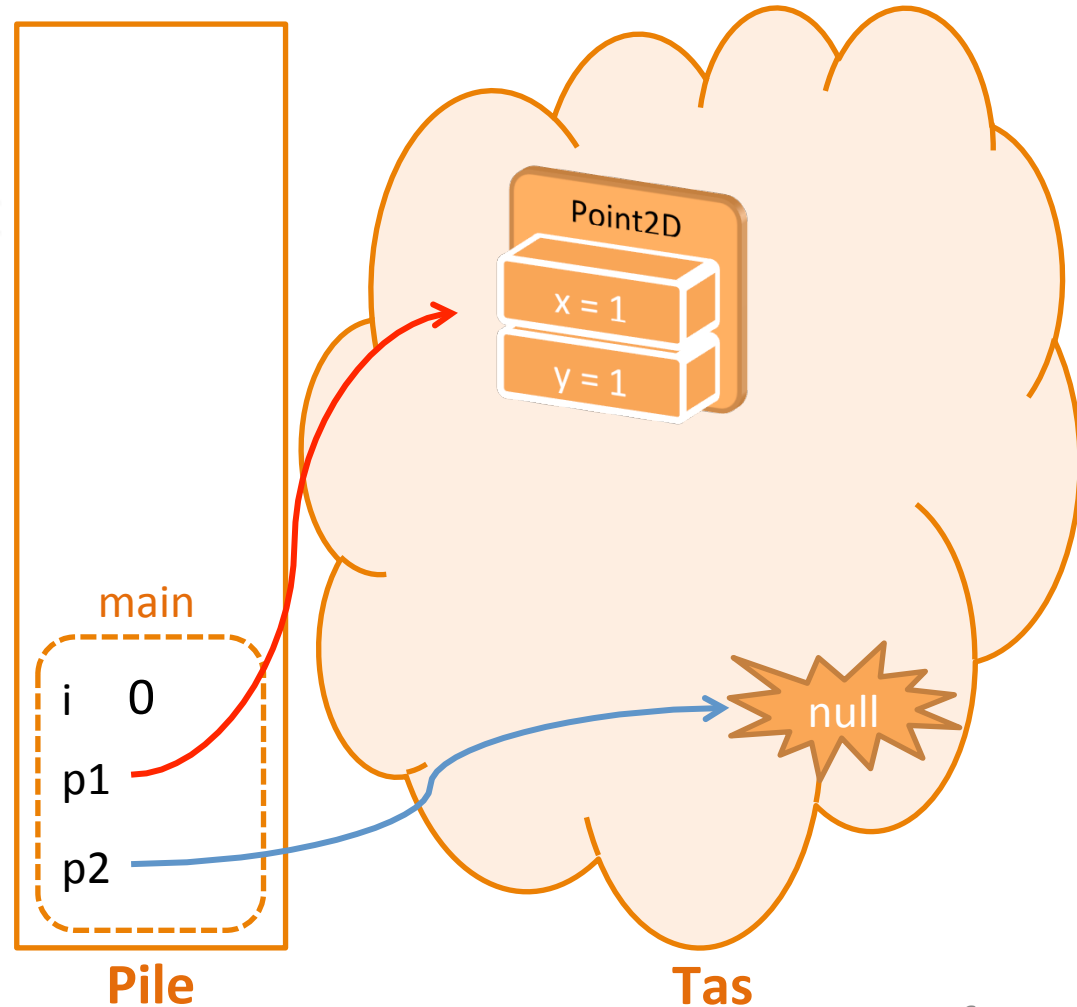
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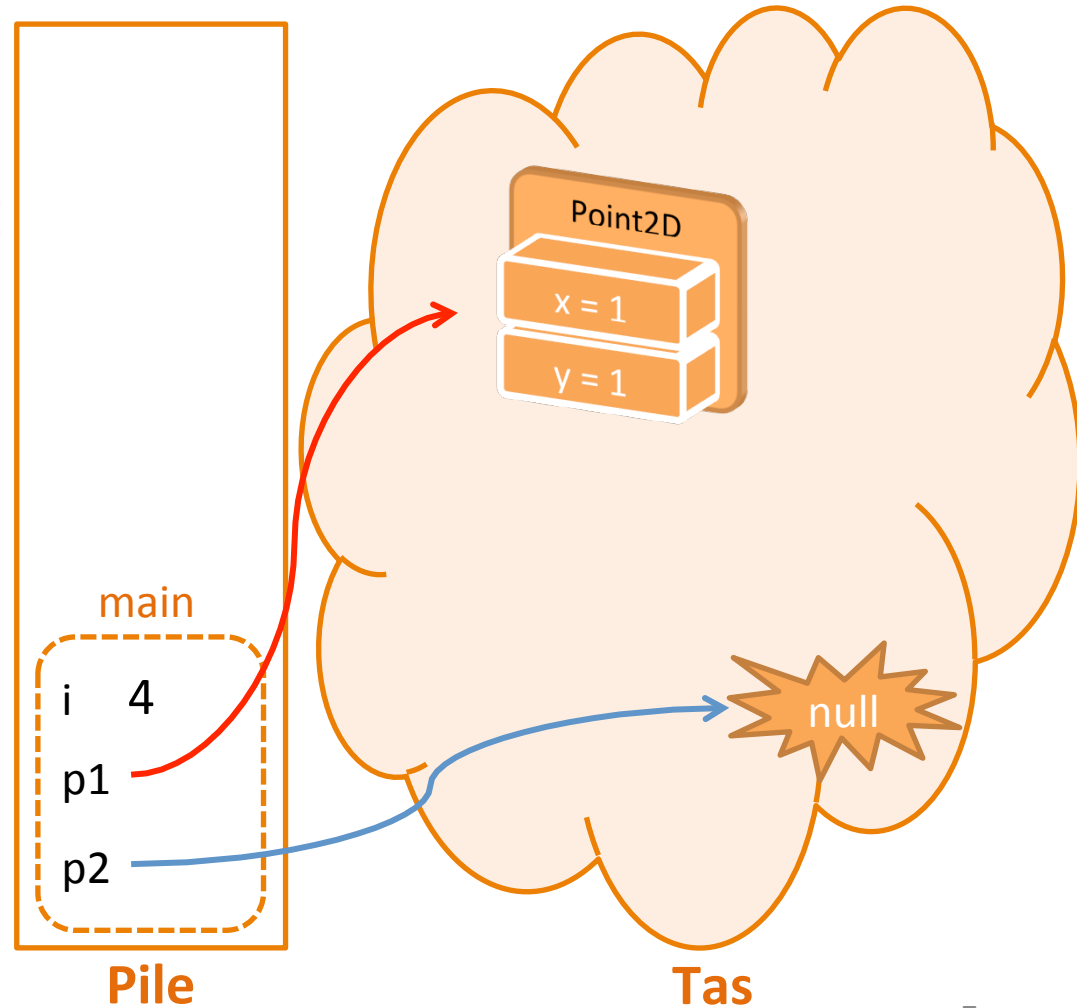
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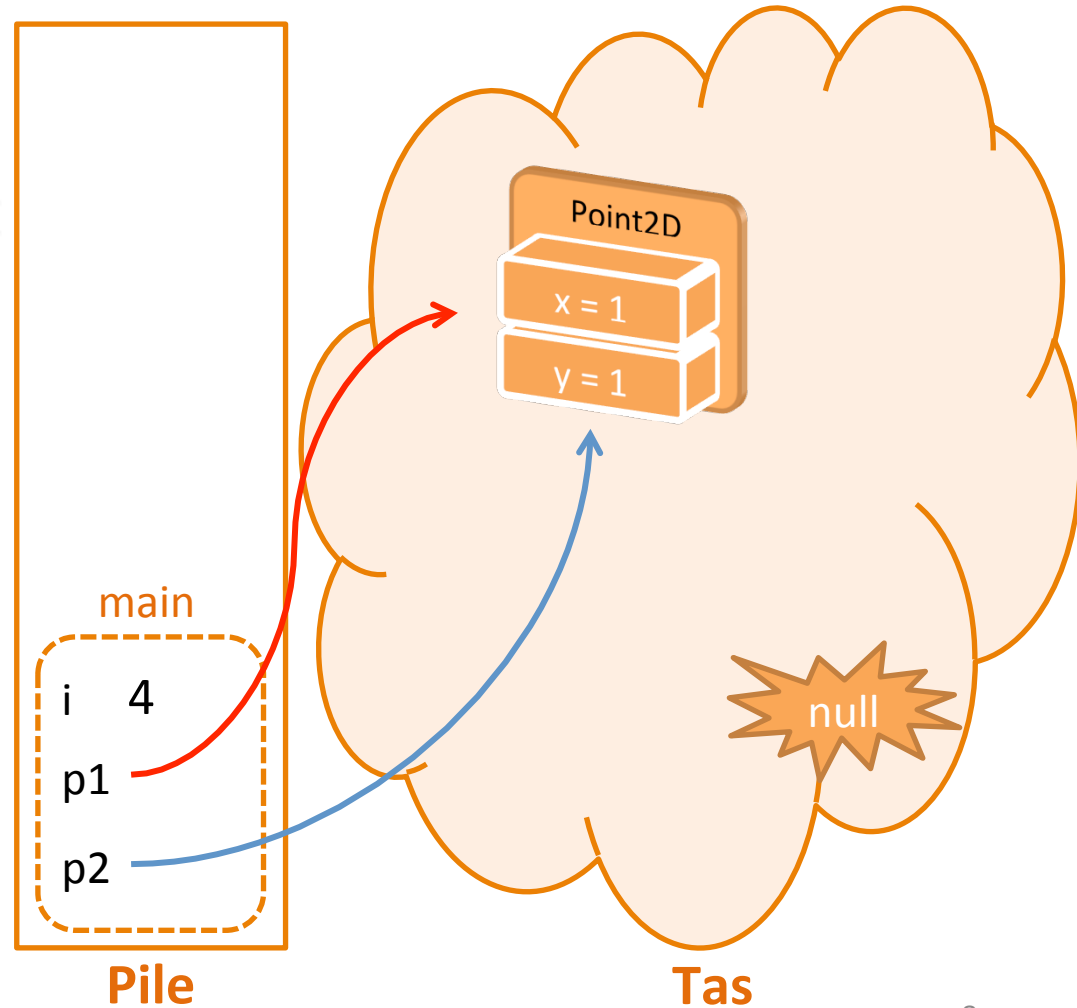
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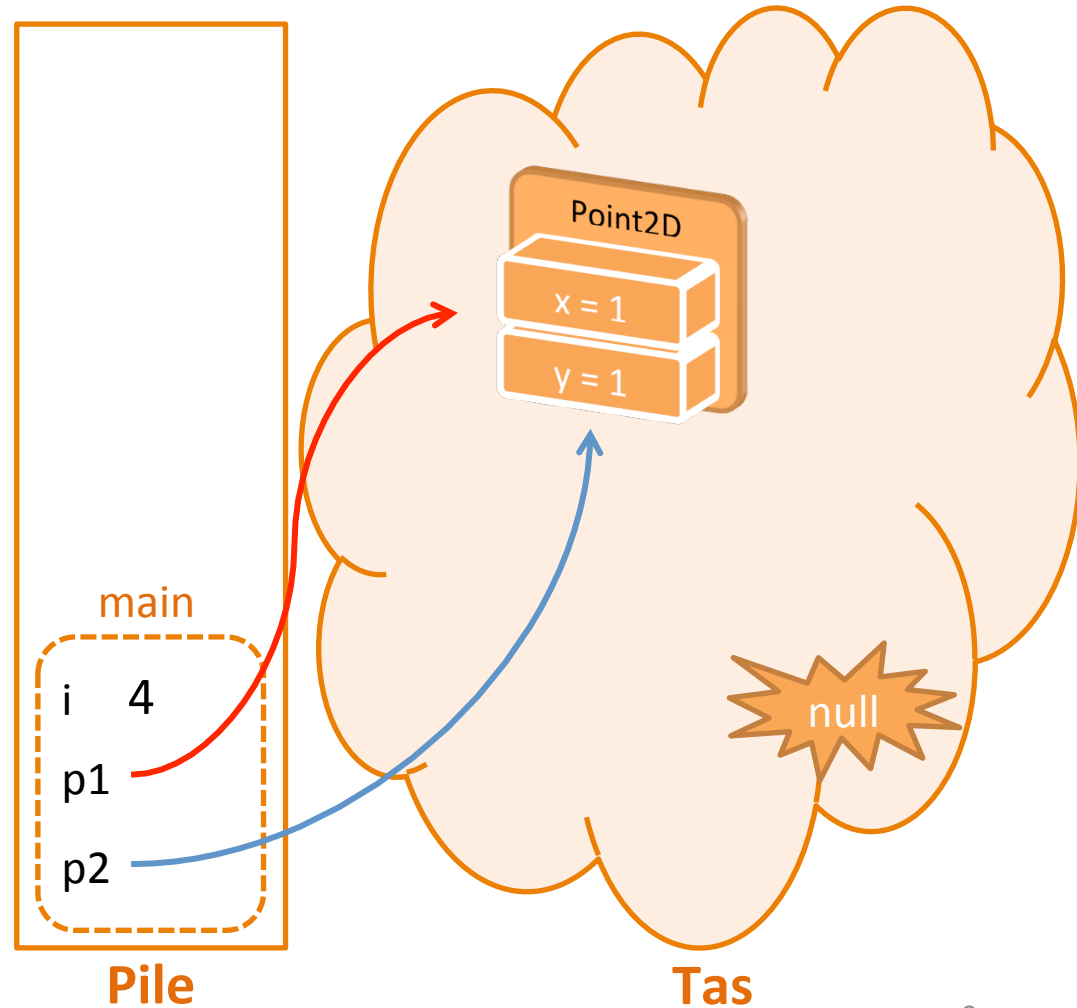


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Affichage console

i vaut : 4

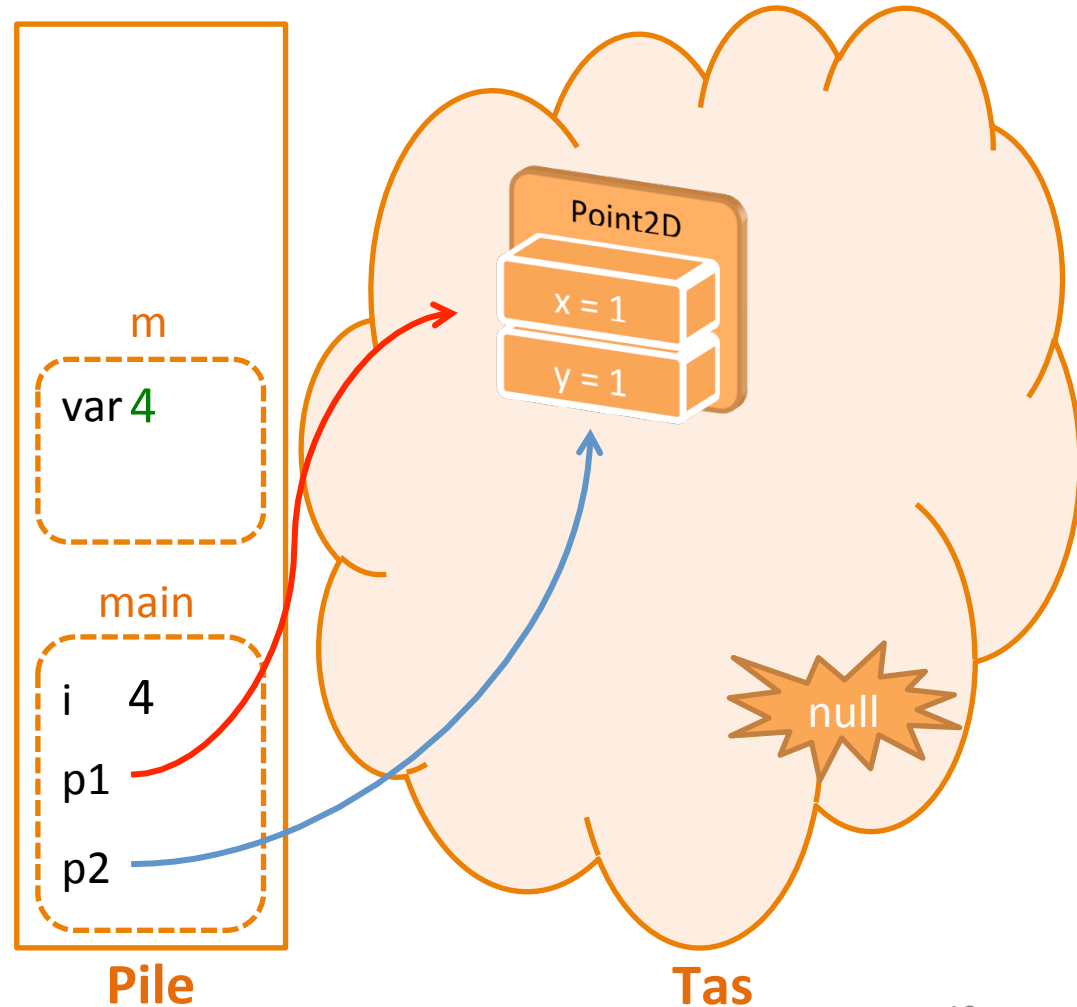


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Affichage console

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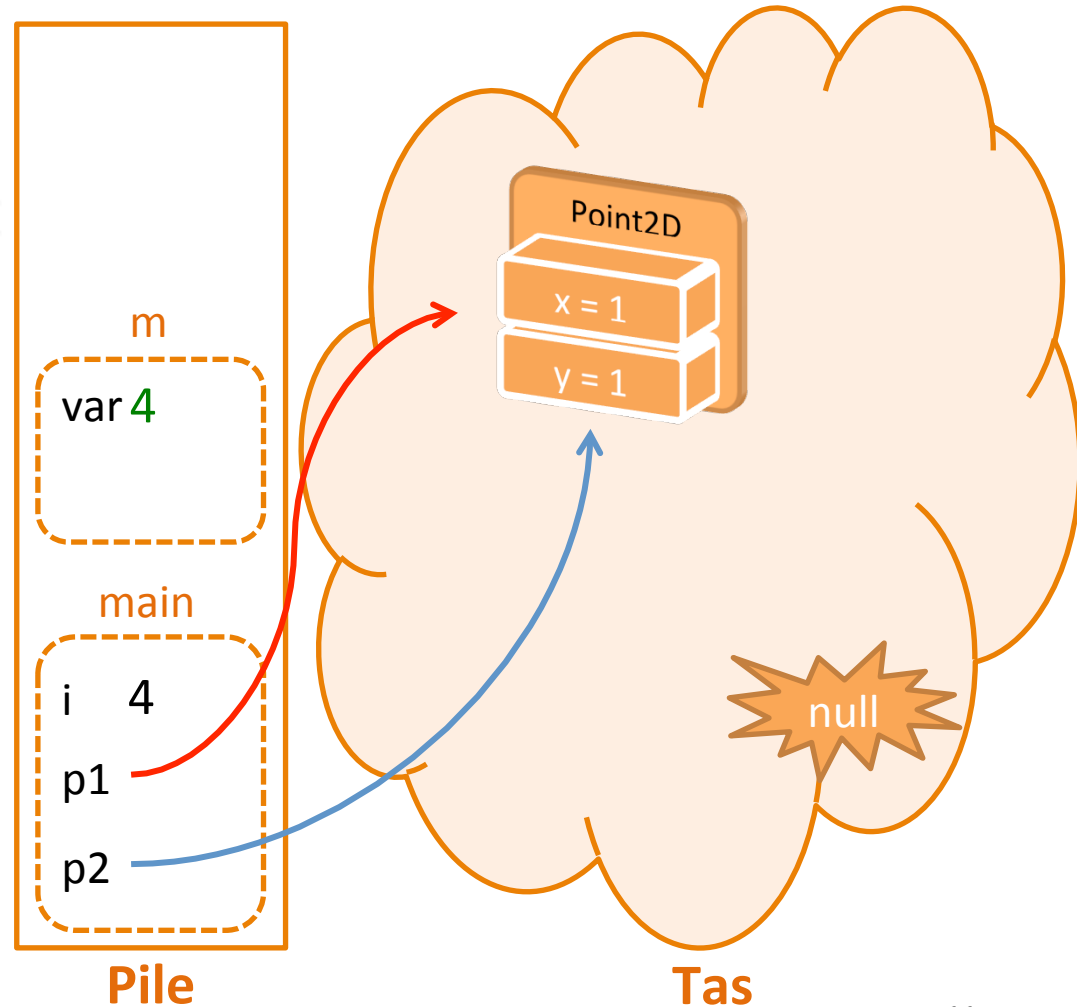


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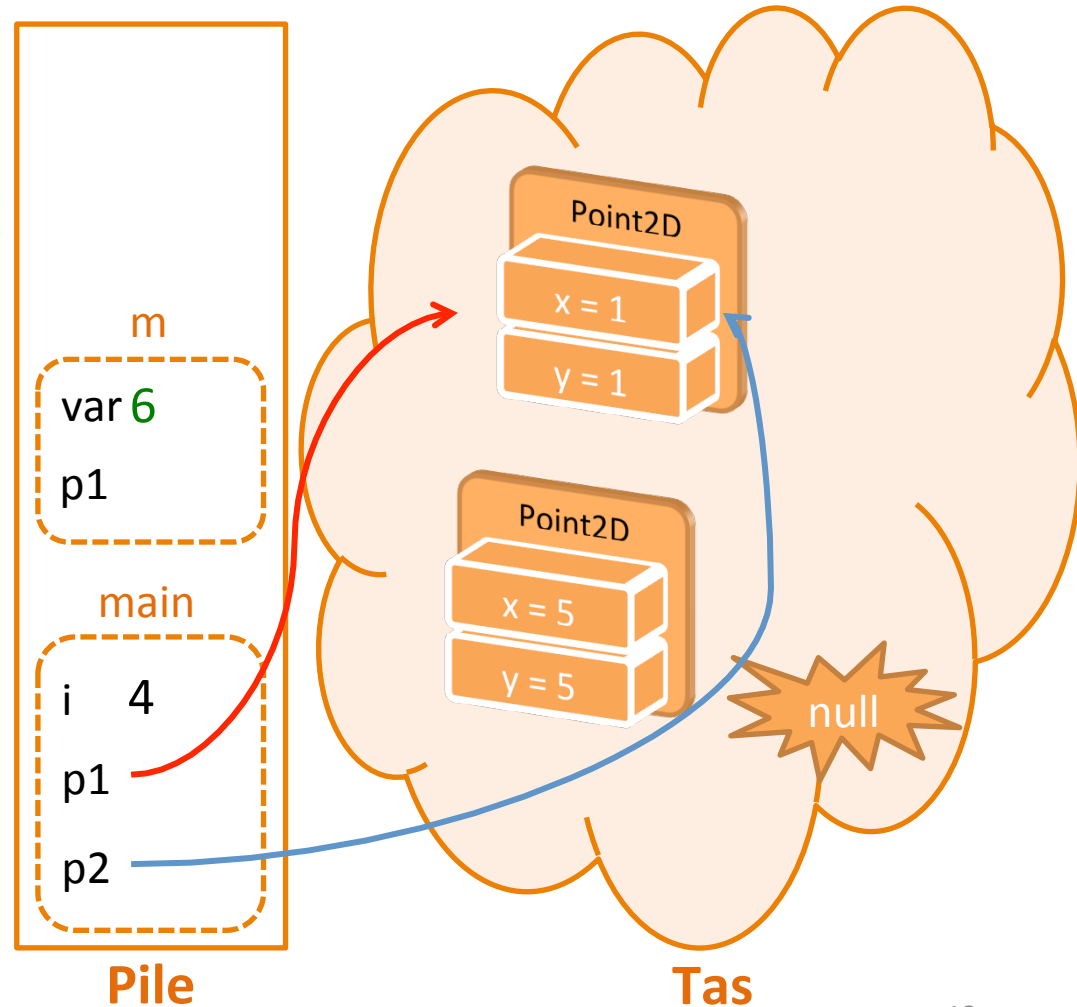


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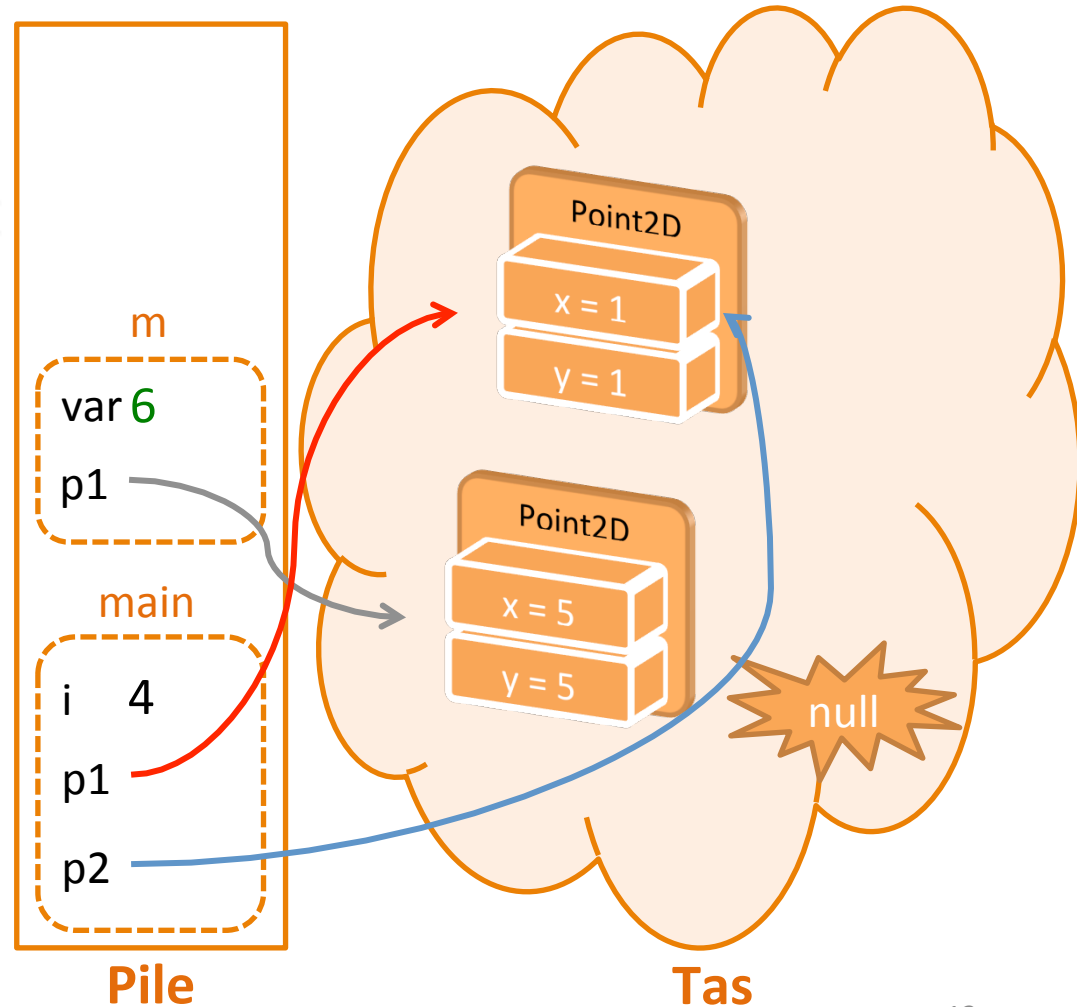


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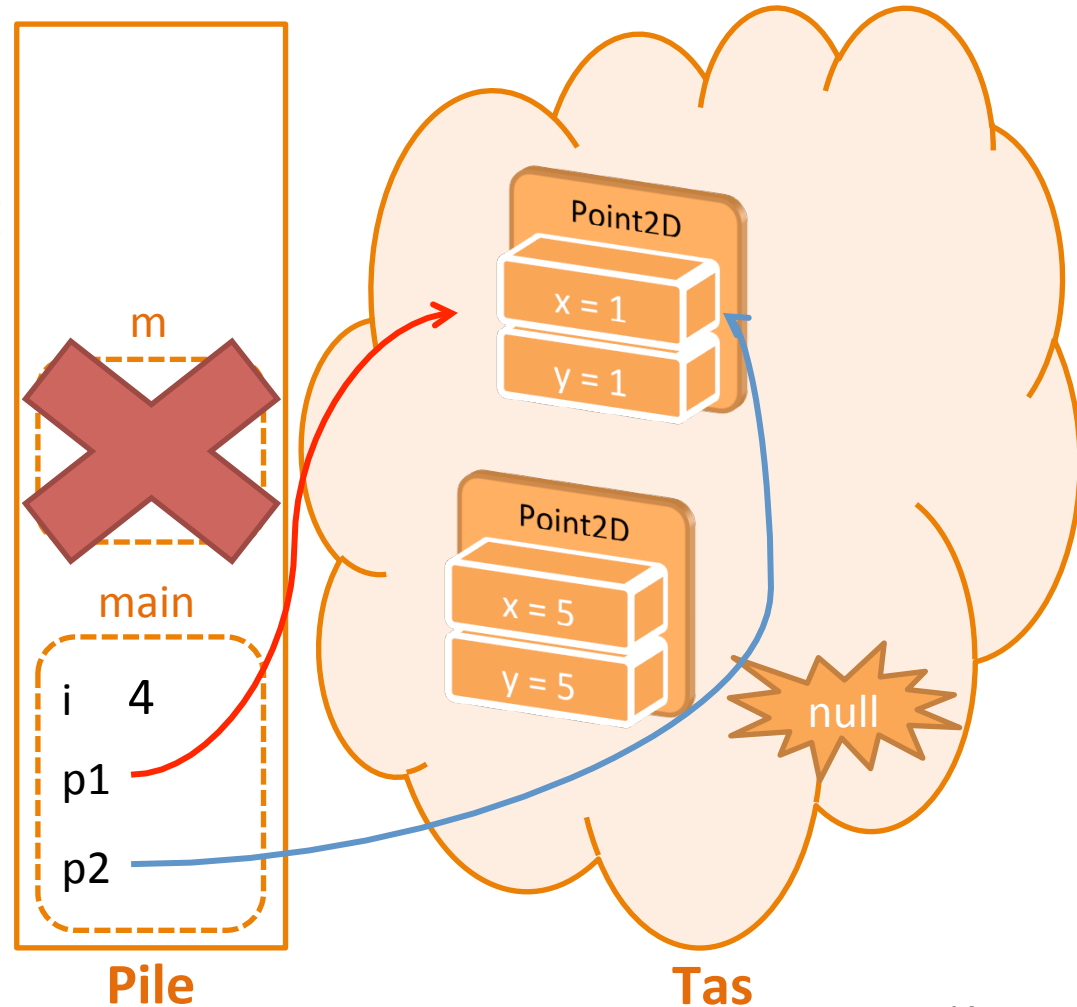


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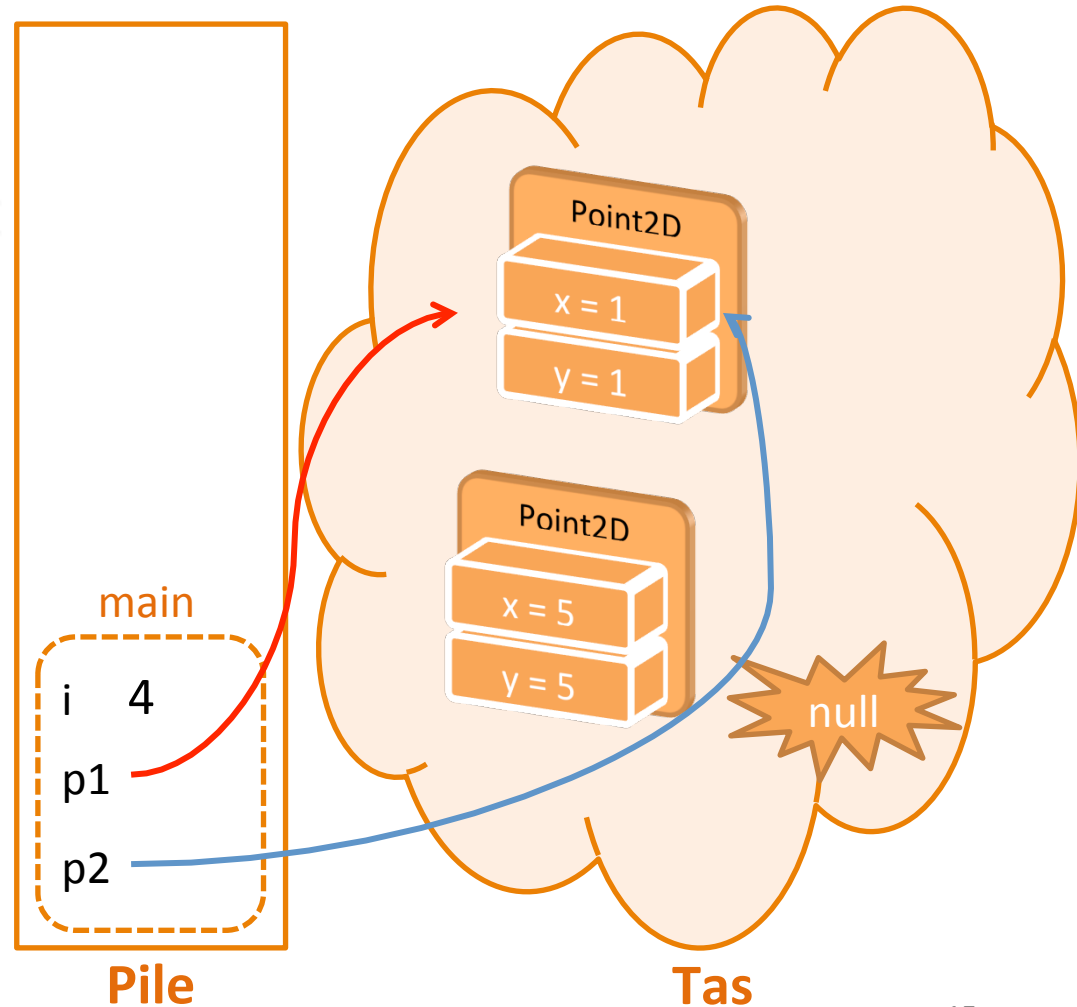


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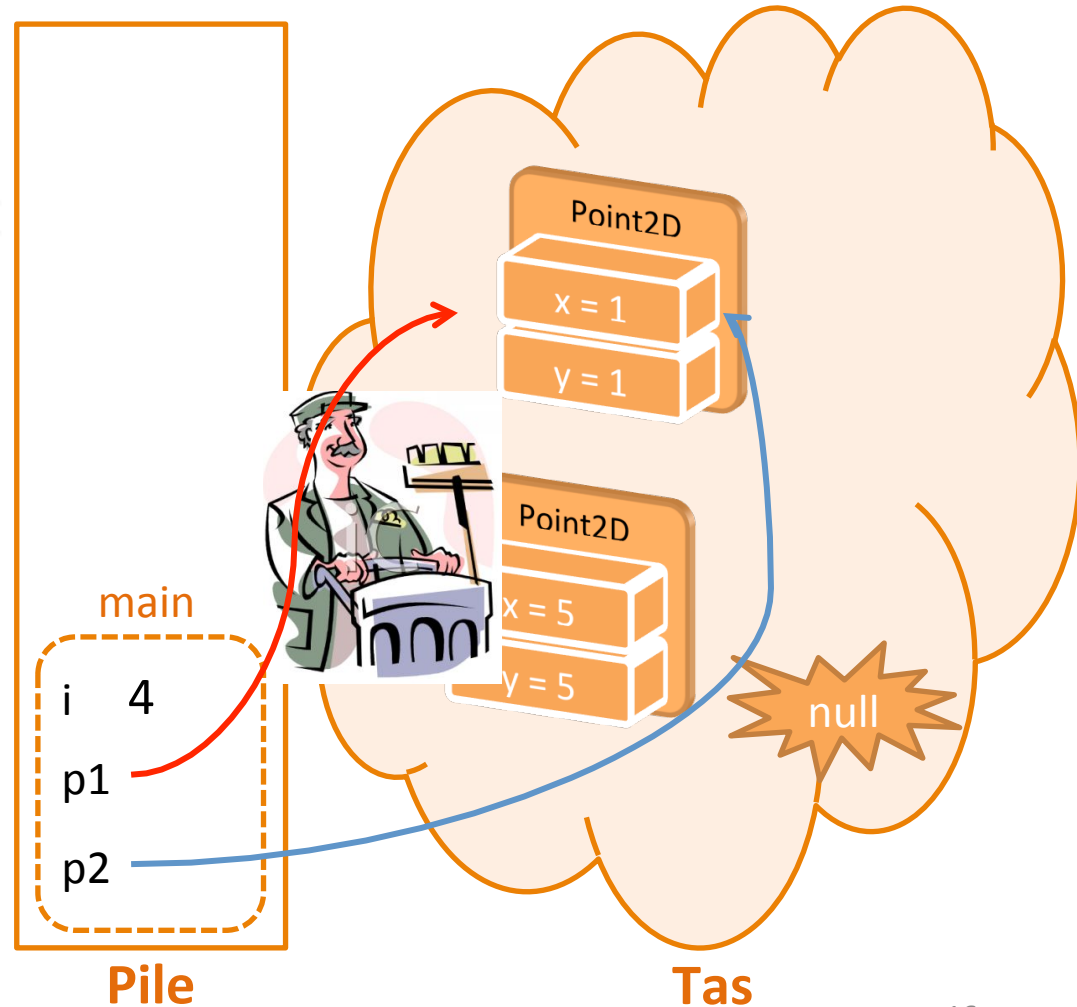
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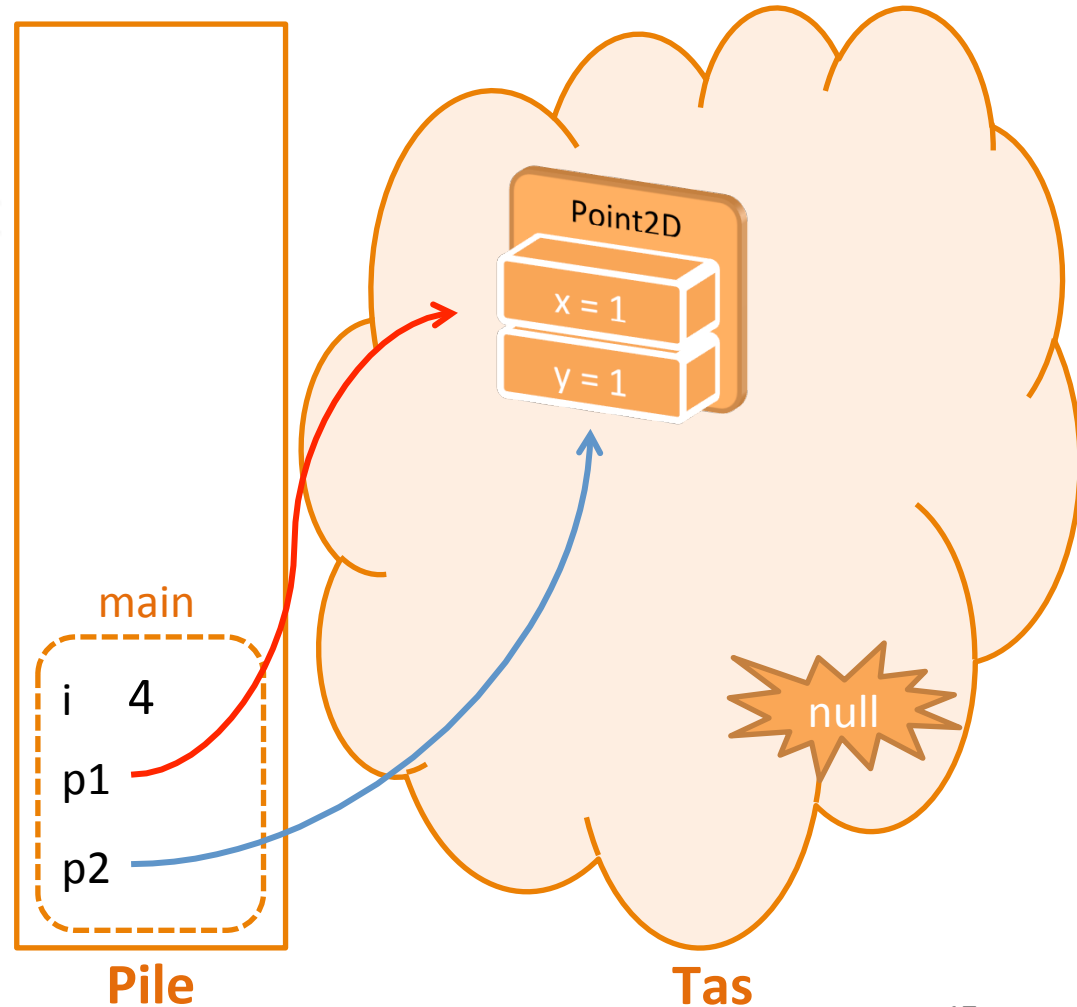
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Résumé

- 2 types de zones mémoire :
 - **Tas** : partagée
 - **Pile** : stocke des contextes locaux créés pour chaque méthode; unique par un thread/programme
- Seules des **données de type primitifs** et des **références à des objets** peuvent être stockées dans la **Pile**
- Tous les **objets** sont **forcément créés** dans le **Tas** et donc **partagés**.
- Java propose un mécanisme de gestion de la mémoire (*Garbage Collection*) → lorsqu'un **objet n'est plus accessible** par personne il est **détruit** !