

```

public class TestSwapArrayInt {

    public static void swap(int[] xs) {

        int[] ys;
        ys = new int[2];

        ys[0] = xs[1];
        ys[1] = xs[0];

        xs = ys;
    }

    public static void main(String[] args) {

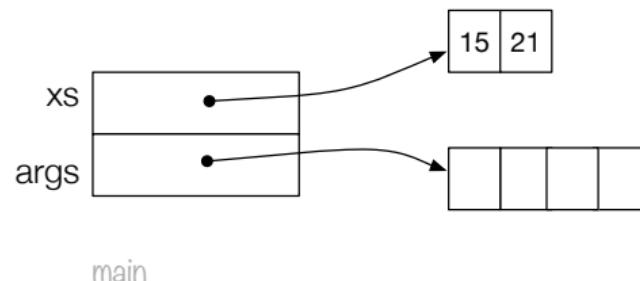
        int[] xs;
        xs = new int[2];

        xs[0] = 15;
        xs[1] = 21;

        swap(xs);

        System.out.println(xs[0]);
        System.out.println(xs[1]);
    }
}

```



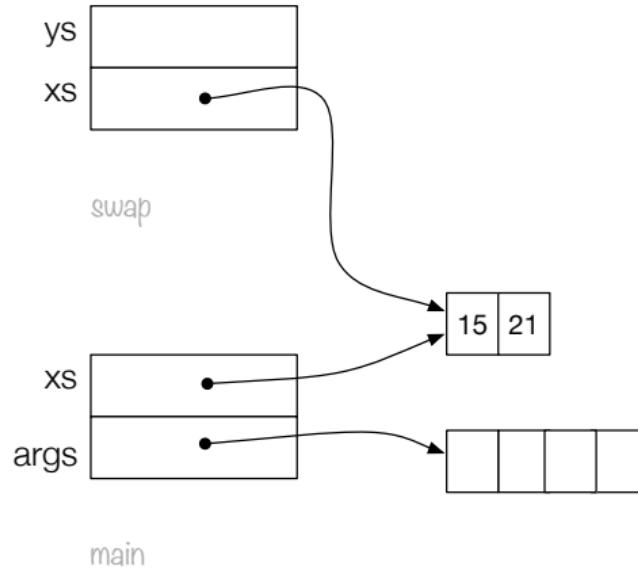
**Mémoire de travail** de la méthode `main`.

```

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    public static void swap(int[] xs) {
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        ys[1] = xs[0];
        xs = ys;
    }

    public static void main(String[] args) {
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        xs = new int[2];
        xs[0] = 15;
        xs[1] = 21;
        swap(xs);
        System.out.println(xs[0]);
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    }
}

```

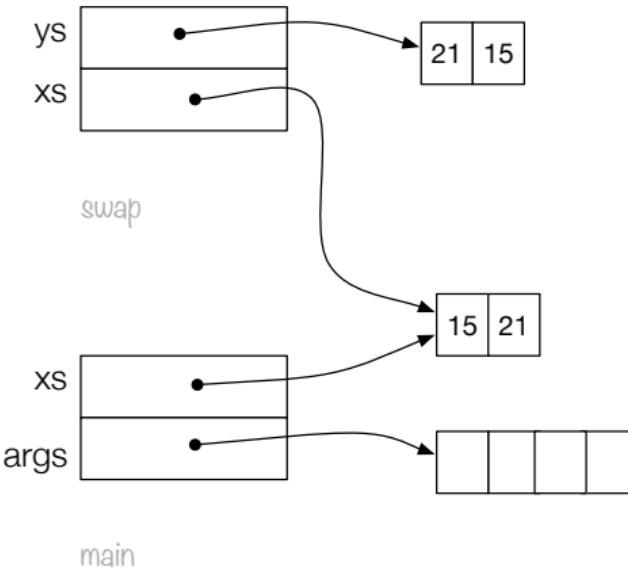


Appel à la méthode **swap**. On copie la valeur du **paramètre actuel** dans le **paramètre formel**.

```

public class TestSwapArrayInt {
    public static void swap(int[] xs) {
        int[] ys;
        ys = new int[2];
        ys[0] = xs[1];
        ys[1] = xs[0];
        xs = ys;
    }
    public static void main(String[] args) {
        int[] xs;
        xs = new int[2];
        xs[0] = 15;
        xs[1] = 21;
        swap(xs);
        System.out.println(xs[0]);
        System.out.println(xs[1]);
    }
}

```

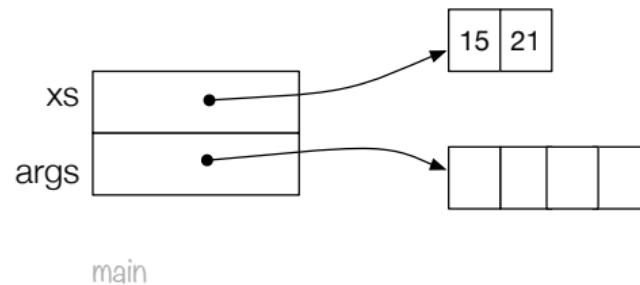
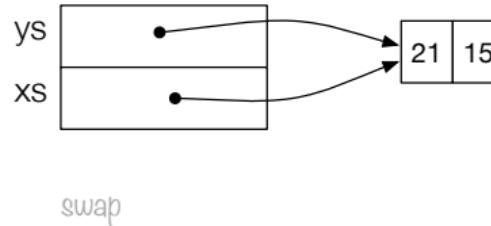


On crée un tableau et l'on sauve la référence dans la variable **ys**. On copie maintenant **xs[1]** dans **ys[0]** et **xs[0]** dans **ys[1]**.

```

public class TestSwapArrayInt {
    public static void swap(int[] xs) {
        int[] ys;
        ys = new int[2];
        ys[0] = xs[1];
        ys[1] = xs[0];
        xs = ys;
    }
    public static void main(String[] args) {
        int[] xs;
        xs = new int[2];
        xs[0] = 15;
        xs[1] = 21;
        swap(xs);
        System.out.println(xs[0]);
        System.out.println(xs[1]);
    }
}

```

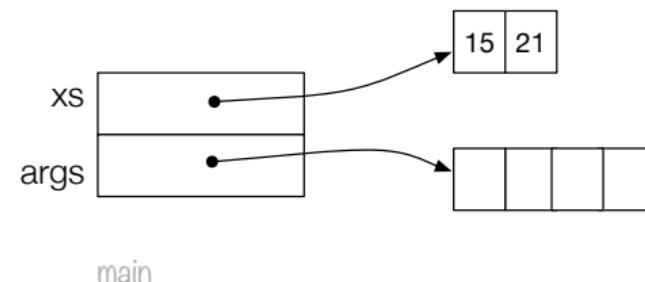


Copier le contenu de **ys** dans **xs** (le paramètre formel de la méthode **swap**).

```

public class TestSwapArrayInt {
    public static void swap(int[] xs) {
        int[] ys;
        ys = new int[2];
        ys[0] = xs[1];
        ys[1] = xs[0];
        xs = ys;
    }
    public static void main(String[] args) {
        int[] xs;
        xs = new int[2];
        xs[0] = 15;
        xs[1] = 21;
        swap(xs);
        System.out.println(xs[0]);
        System.out.println(xs[1]);
    }
}

```



Retour à la méthode **main**. La mémoire de travail de la méthode **swap** est détruite. Affiche le contenu de **xs[0]** et **xs[1]** (la variable locale **xs** de la méthode **main**).