# Sorting an array

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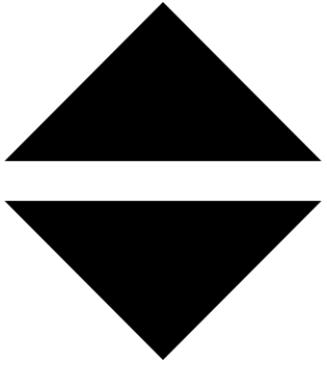
# 1. Sorting an array



# 1. Sorting an array

BubbleSort

# 1. Sorting an array

6 5 3 1 8 7 2 4

https://es.wikipedia.org/wiki/Archivo:Bubble-sort-example-300px.gif

## BubbleSort: ascending order

```
float[] scores = {7.5f,5.0f,10.0f,6.0f,10.0f};
for (int i=0; i<scores.length-1;i++){
   for (int j=i+1;j<scores.length;j++){
      if (scores[i]>scores[j]){
         float cambio = scores[i];
         scores[i] = scores[j];
         scores[j]=cambio;
      }
   }
}

System.out.println("El array ordenado es: ");
for (int i=0; i<scores.length;i++){
   System.out.print(scores[i]+" ");
}
System.out.println();
```

Prints

5.0 6.0 7.5 10.0 10.0

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}
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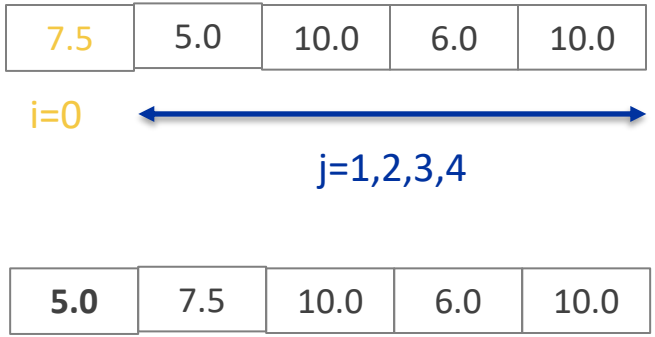

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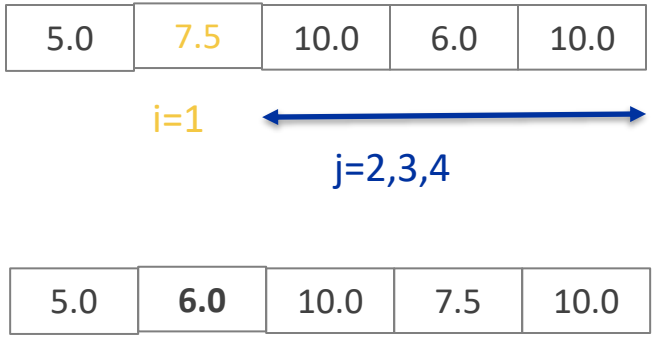
         scores[j]=cambio;
      }
   }
}
```



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      if (scores[i]>scores[j]){
         float cambio = scores[i];
         scores[i] = scores[j];
         scores[j]=cambio;
      }
   }
}
```

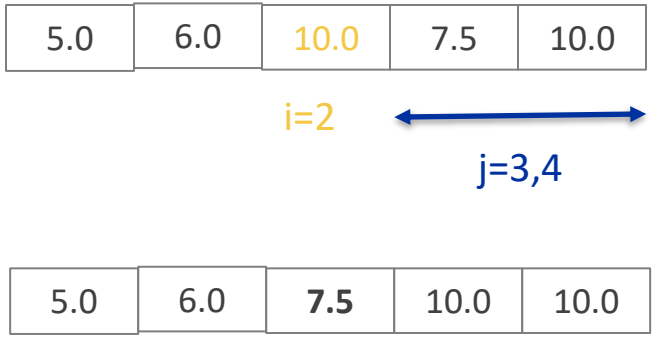

## BubbleSort: descending order

```
float[] scores = {7.5f,5.0f,10.0f,6.0f,10.0f};
for (int i=0; i<scores.length-1;i++){
   for (int j=i+1;j<scores.length;j++){
      if (scores[i]<scores[j]){
         float cambio = scores[i];
         scores[i] = scores[j];
         scores[j]=cambio;
      }
   }
}

System.out.println("El array ordenado es: ");
for (int i=0; i<scores.length;i++){
   System.out.print(scores[i]+" ");
}
System.out.println();
```

Prints
10.0 10.0 7.5 6.0 5.0

# 1. Sorting an array

## java.util.Arrays

```
float[] scores = {7.5f,5.0f,10.0f,6.0f,10.0f};

Arrays.sort(scores);

System.out.println("El array ordenado es: ");
for (int i=0; i<scores.length;i++){
   System.out.print(scores[i]+" ");
}
System.out.println();
```

Prints
5.0 6.0 7.5 10.0 10.0

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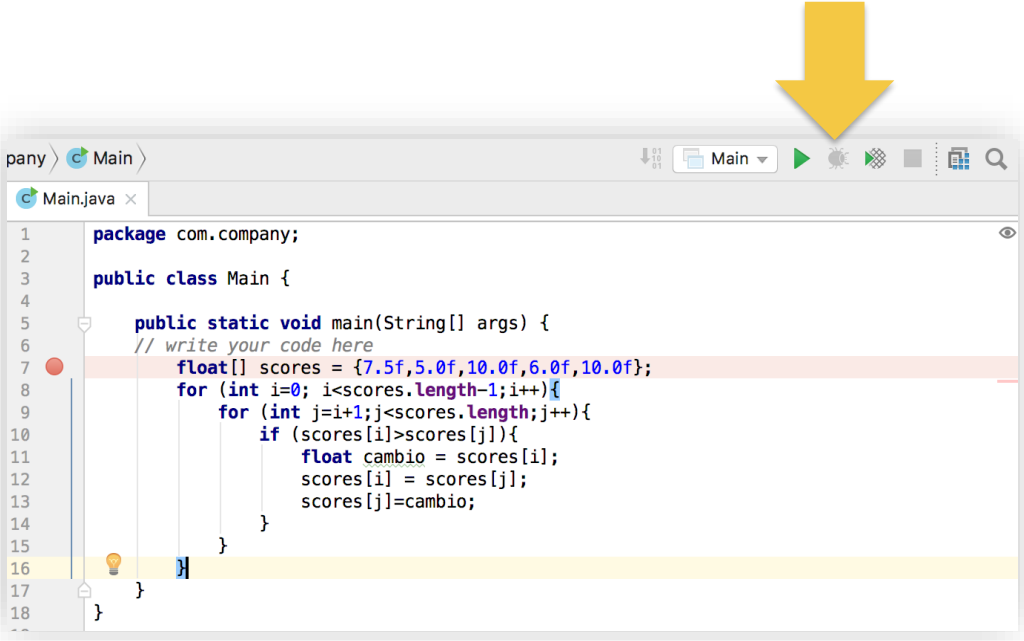


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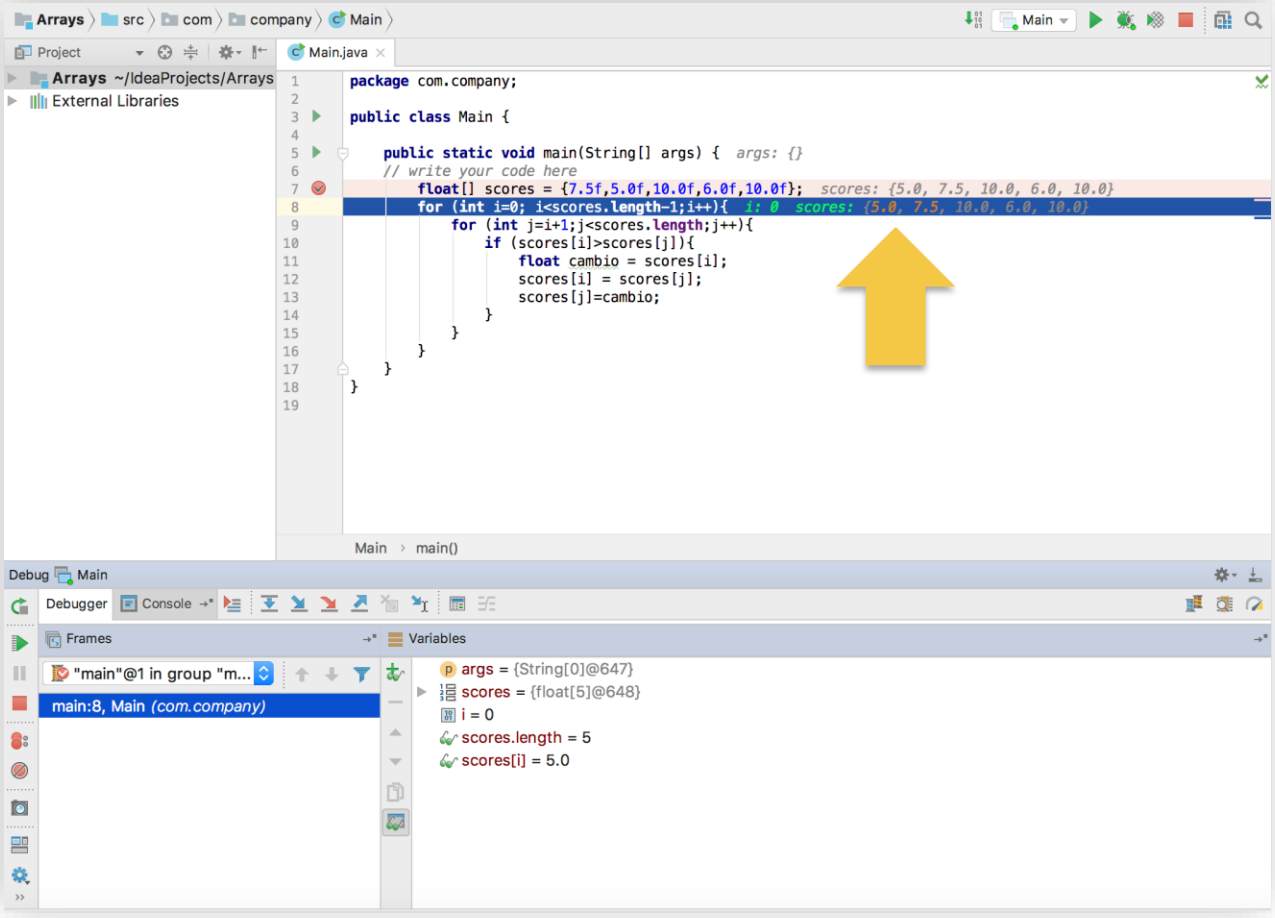

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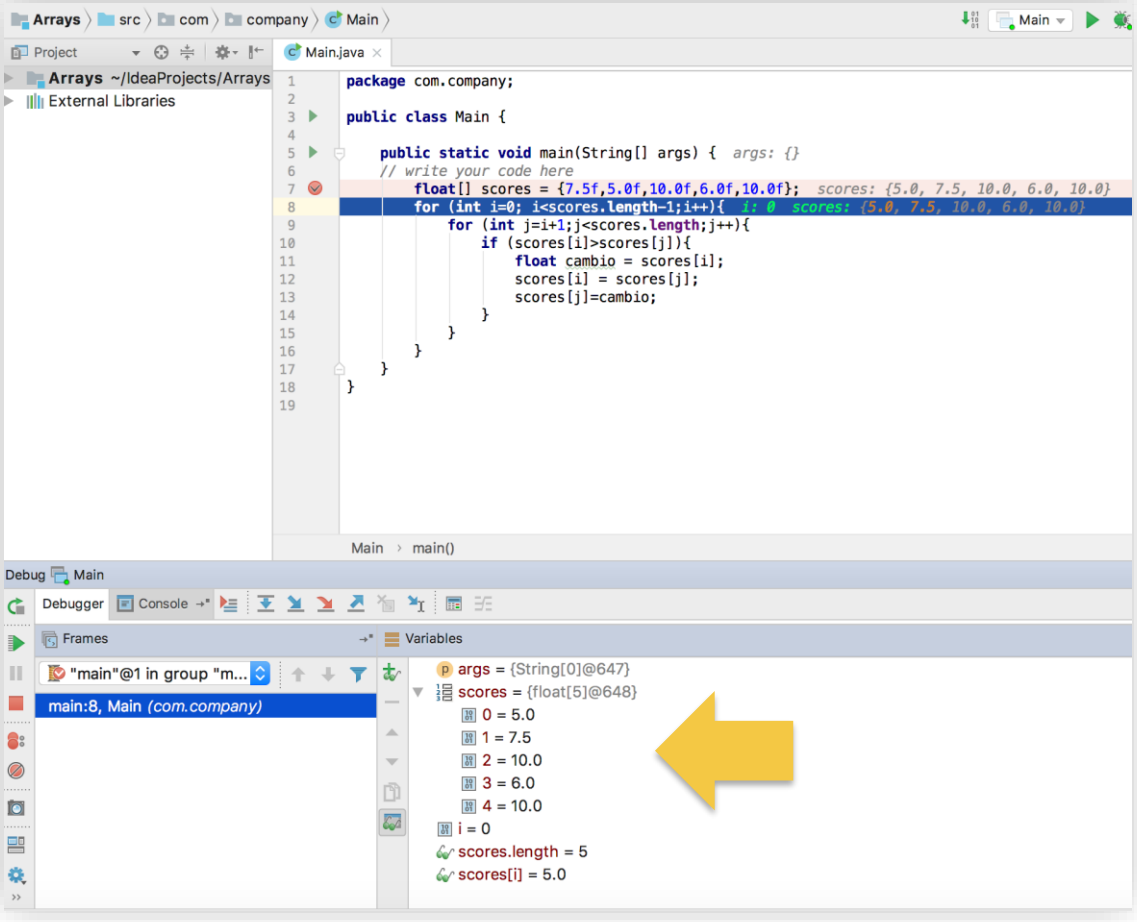

“La lógica te llevará desde el punto A al B. La imaginación te llevará a todas partes. “

*Albert Einstein*