

# Union-Box Assignment

---

Hey there!

We're trying something new with this assignment, a new marking framework and a new submission system. (I'm also using Unit tests this time - so hopefully a bit more stable and easier testing)

Read this *carefully* if you want to make your submissions count!

## Language file

---

Similar to previous sessions - we're going to be using the `LANGUAGE` file to select what language you are using.

Please uncomment **ONLY ONE** language.

## Python

---

### `union_box.py`

This is the **ONLY** file you need to edit, simply implement the `merge` function and you're good to go!

The merge function simply takes two "boxes" (or outlines of multiple boxes) and merges them together.

**Aside:** The coordinates in python are Tuples, so `[0]` will reference the `x`, and `[1]` will reference the `y`.

E.g.



## Java

---

### **IMPORTANT NOTE - MAIN FOLDER IS REQUIRED**

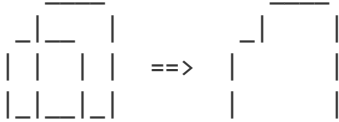
We need the "main" folder, (for `package main`) to be able to run the files in the test suite, so please make sure you don't change them from there!

## UnionBox.java

Again, this is the **ONLY** file that you're going to need to modify.

The merge function simply takes two "boxes" (or outlines of multiple boxes) and merges them together.

E.g.



## Coordinate.java

Unfortunately, Java didn't have a nice `Pair` or `Tuple` that we could use nicely. So I implemented a `Coordinate` class.

The constructor: `new Coordinate(x, y)` takes 2 integers, the X position and Y position.

`Coordinate.x`

This returns the X position of the coordinate.

`Coordinate.y`

This returns the Y position of the coordinate.

## SUBMISSIONS - DO NOT INCLUDE TESTS!!!

---

### Python

For Python, the submission **ZIP** should look like this:

```
.
├── box.py
├── LANGUAGE
├── union_box.py
└── union_interface.py
```

### Java

For Java, The submission **ZIP** should look like this: (all your java files in the "main" folder)

```
.
├── LANGUAGE
├── main
│   ├── Box.java
│   ├── Coordinate.java
│   ├── UnionBox.java
│   └── UnionInterface.java
```