

# Context Clues (Build Errors)

**2** **Main.java**: **52**: error: **4** incompatible types: inference variable T has incompatible bounds  
List<Integer> input = Arrays.asList("6", "5", "12", "10", "9", "1");  
equality constraints: **Integer** **5**  
lower bounds: **String** **6**  
where T is a type-variable:  
T extends Object declared in method <T>asList(T...)  
**2** **Main.java**: **56**: error: **4** cannot find symbol  
List<Integer> sortedList = sorter.mergeSort(inputs);  
**3** symbol: variable **inputs** **7**  
location: **class Main** **8**  
**1** **2 errors**

- 1** The number of build errors that exist. Start with the first and work down.
- 2** The file name where the error is.
- 3** The line number where the error is.
- 4** A brief description of the error. Can help explain why the error is occurring.
- 5** A pointer to where in the line the error is.
- 6** Type information about the variable causing the error.
- 7** Name of the variable that is causing the error. Check the spelling for typos.
- 8** The class where the error is. Can be helpful for large programs that have multiple classes in a file.

# Context Clues (Runtime Errors)

```
Exception in thread "main" java.lang.IndexOutOfBoundsException: Index 1 out of bounds for length 1
    at java.base/jdk.internal.util.Preconditions.outOfBounds(Preconditions.java:64)
    at java.base/jdk.internal.util.Preconditions.outOfBoundsCheckIndex(Preconditions.java:70)
    at java.base/jdk.internal.util.Preconditions.checkIndex(Preconditions.java:248)
    at java.base/java.util.Objects.checkIndex(Objects.java:372)
    at java.base/java.util.AbstractList$SubList.get(AbstractList.java:784)
    4 at MergeSorter.mergeSort(Main.java:29) 3
    at MergeSorter.mergeSort(Main.java:19)
    at MergeSorter.mergeSort(Main.java:19)
    at Main.main(Main.java:56)
```

- 1** A brief description of the error. Can help explain why the error is occurring.
- 2** File name and line numbers for most recently called functions. Work your way down and skip library code (files you did not write).
- 3** The file name and line number where the error is occurring. This should be the first file where you wrote code.
- 4** The class and function where the error is occurring.
- 5** A more detailed description of the error. May contain more details when working with complex objects (e.g. the index or length of a list).