

## Discussion Questions for “First Class Functions”

1. For many years, Java treated functions as “second-class citizens”. Why did we think of functions as second-class citizens? What was missing from the Java language?
2. Does Python have a way to treat functions as first-class citizens? If so, how does that work? What about C?
3. The lecture used the “Comparator” interface as an example of the requirement to pass a function as an argument to a method. Can you think of other examples where we might want to pass in a function as an argument to a method?
4. The example in the lecture, using “Comparator” showed the need for a function which takes two objects of a specific type, and returns an integer result. Would all examples of functions as arguments to methods use the same function signature? Do the code of the method which uses that function and the provider of the function need to agree on the function signature? How is that agreement checked by the compiler? Can that checking still take place on a Lambda expression?