Algorithms in LATEX

Dr. Milaan Parmar milaanparmar9@gmail.com

August 9, 2021

```
Require: Randomly populated array
Ensure: Sorted array
if i \le 0 then
```

```
\begin{array}{ll} & \text{if } i \leq 0 \text{ then} \\ 2: & i \leftarrow 1 \\ & \text{else} \\ 4: & \text{if } i \geq 0 \text{ then} \\ & & \text{for } j = 0 \text{ to } 10 \text{ do} \\ 6: & & \text{blah}() \\ & & & \text{carryOutSomeProcessing}() \\ 8: & & \text{end for} \\ & & & \text{end if} \\ 10: & & \text{end if} \\ & & & & \text{return i} \end{array}
```

Algorithm 1 My First Simple Algorithm

And of course, we can refer to the algorithm using \ref: See Algorithm 1 but the good thing is we can also refer to a specific line e.g. Line 4 or Line 7.