

## CSE 332: Data Structures and Parallelism

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### Exercises (Parallelism)

**Directions:** *Submit your solutions using gitlab. You must fill out the partners form for para to get access to your repository. Choosing a partner is disabled, because these exercises are solo.*

#### EX11. hasOver (20 points)

Use the ForkJoin framework to write the following method in Java:

```
public static boolean hasOver(int val, int[] arr, int sequentialCutoff)
```

Returns true if arr has any elements strictly larger than val.

For example, if arr is [21, 17, 35, 8, 17, 1], then  
`hasOver(21, arr) == true` and `hasOver(35, arr) == false`.

Your code must have  $\mathcal{O}(n)$  work,  $\mathcal{O}(\lg n)$  span, where  $n$  is the length of arr, and actually use the sequentialCutoff argument.