

ECS 140A: Fall 2023 Homework Assignment 5

Due Date: No later than Friday, December 8, 11:00pm PST

For each of the following problems, provide a pattern-matching solution in Erlang. Do not resort to just giving a new name to an existing Erlang function that already does what we want your function to do. Submit your solutions via Gradescope as a single file named "hw5.erl". Don't forget your 'module' and 'export' statements at the beginning of the file.

Grading will be on a 3-point scale for each solution (5 problems x 3 points maximum per solution = 15 points maximum).

And now, here are your last homework problems:

1) myremoveduplicates

```
myremoveduplicates("abacad") => "bcad"
myremoveduplicates([3,2,1,3,2,2,1,1]) => [3,2,1]
```

2) myintersection

```
myintersection("abc", "bcd") => "bc"
myintersection([3,4,2,1], [5,4,1,6,2]) => [4,2,1]
myintersection([], [1,2,3]) => []
myintersection("abc", "") => ""
```

3) mylast

```
mylast("") => ""
mylast("b") => "b"
mylast("abcd") => "d"
mylast([1,2,3,4]) => [4]
mylast([]) => []
```

4) myreverse

```
myreverse("") => ""
myreverse("abc") => "cba"
myreverse([1,2,3]) => [3,2,1]
myreverse([]) => []
```

5) myreplaceall

```
myreplaceall(3,7,[7,0,7,1,7,2,7]) => [3,0,3,1,3,2,3]
myreplaceall(3,9,[7,0,7,1,7,2,7]) => [7,0,7,1,7,2,7]
```