

CEN 133 Hw 3

Problem 1.(40 pts) You are requested to implement the following procedure using mutable lists:

```
(modify-even-indices my-list new-element)
```

This procedure should modify each element which's index in the list is even. The value of the element should be equal to the new-element.

For example:

```
(define number-list (1 56 8 1 43 9 78))
```

```
(modify-even-indices number-list 10)
```

The new list: 1 **10** 8 **10** 43 **10** 78

Problem 2.(60 pts) This problem is the extended version of Problem 1. You are requested to implement the following procedure using mutable lists:

```
(modify-even-odd-indices my-list new-element modification-type)
```

This procedure should modify each element according to the modification-type.

The modification-type can be even or odd.

For example:

```
(define number-list (1 56 8 1 43 9 78))
```

```
(modify-even-odd-indices number-list 10 'even')
```

The new list: 1 **10** 8 **10** 43 **10** 78

```
(modify-even-odd-indices number-list 10 'odd')
```

The new list: **10** 56 **10** 1 **10** 9 **10**

Deadline: 19.January. 2011, 23:59

Submission: Please submit your homework to the grader by e-mail until the deadline.

(Grader: Deniz Ozsoyeller, e-mail: deniz.ozsoyeller@izmir.edu.tr).

Homework Policies:

Cheating is strongly discouraged.

1. Late homeworks will be graded as 0.
2. File naming for the homework:
Send your file as: CEN133Hw3_“YourStudentNo”.rkt
example: CEN133Hw3_80201022.rkt
3. When sending your homework the subject part of your e-mail should be CEN133Hw3_YourStudentNo.

Note: Please obey these grading policies, unless your grade will be decreased.

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