**CS 410W**

**Assignment 15**

**By: Surya Singh**

**Due: Tuesday, March 31,2020**

1. #lang racket

(define(Volume Radius)

(\*(/ 4 3)3.1415926 Radius Radius Radius)

)

(Volume 10.7)

Output

5131.448031309064

1. #lang racket

(define (zerocount numbers)

(cond

((null? numbers)0)

((zero? (car numbers))(+ 1 (zerocount (cdr numbers))))

(else (zerocount(cdr numbers)))))

(zerocount '(7 0 99 0 -8 44 0))

Output

3

1. #lang racket

(define (average lst)

(define newList (remove\* (list (apply min lst)) lst))

(define newList1 (remove\* (list (apply max newList)) newList))

(/ (apply + newList1) (length newList1)))

(average '(7 6 3 10 9))

Output

7 1/3

1. #lang racket

(define (del a lst)

(cond ((null? lst) lst)

((list? (car lst))

(cons (del a (car lst)) (del a (cdr lst))))

((equal? a (car lst)) (del a (cdr lst)))

(else (cons (car lst) (del a (cdr lst))))))

(del 3 '(5 3 4 3 99 88 3))

Output

'(5 4 99 88)