Yang Tang.   ID: 53979886   Homework 1

Compilation:

```
yangt8@andromeda-3 01:24:46 ~/hw/hw1
[$ make
echo      ------------compiling MyString.ccp to create executable program main-----------------
------------compiling MyString.ccp to create executable program main----------------
g++  -ggdb   -std=c++11   MyString.cpp   -o   MyString
```

Valgrind Memory Check:

```
yangt8@andromeda-3 01:24:55 ~/hw/hw1
[$ valgrind ./MyString
==21679== Memcheck, a memory error detector
==21679== Copyright (C) 2002-2017, and GNU GPL'd, by Julian Seward et al.
==21679== Using Valgrind-3.13.0 and LibVEX; rerun with -h for copyright info
==21679== Command: ./MyString
==21679==
-------------------------------------------------------
test Copy
m: abc
m1: abc
m==m1 is true.

-------------------------------------------------------
test Assign
m: abc
m1: abc
m==m1 is true.

-------------------------------------------------------
test Index
m: abcdefg   m[3]: d

-------------------------------------------------------
test Length
m: abcdefg   m.length(): 7

-------------------------------------------------------
test IndexOfChar
m: abcdefg   m.indexOf('b'):1   m.indexOf('e'):-1

-------------------------------------------------------
test IndexOfStr
m: abcdefgh   m.indexOf('def'):3   m.indexOf('ded'):-1

-------------------------------------------------------
test EqualOperator
m1: abcd   m2: abcd   m1==m2 is true.

-------------------------------------------------------
test AddOperator
m3: abcdefgh   m4: abcdefgh   m3==m4 is true.

-------------------------------------------------------
test AddEqualOperator
m1: abcdefgh   m3: abcdefgh   m1==m3 is true.

-------------------------------------------------------
test Reverse2
m1.reverse(): dcba   m2: dcba   m1.reverse()==m2 is true.

-------------------------------------------------------
test Read
Please input a word:
[abcd
```

```
-----------------------------------------------------------
test Read
Please input a word:
abcd
Your input is: abcd

Net memory allocated at program end: 0
(should be zero! positive = memory leak, negative = duplicate delete)
==21679==
==21679== HEAP SUMMARY:
==21679==     in use at exit: 0 bytes in 0 blocks
==21679==   total heap usage: 34 allocs, 34 frees, 780 bytes allocated
==21679==
==21679== All heap blocks were freed -- no leaks are possible
==21679==
==21679== For counts of detected and suppressed errors, rerun with: -v
==21679== ERROR SUMMARY: 0 errors from 0 contexts (suppressed: 0 from 0)
yangt8@andromeda-3 01:27:51 ~/hw/hw1
```