NO REMOVE

```
=================================================
Growth_type=relative, growth_value=2, prob_remove=0.0
=================================================
Experimenting with list size 10000
Running experiments |#############################| 3/3
Average Time: 0.0089 seconds
Average Capacity: 16384.0
Average Resizes: 14.0
Average Append Copies: 16383.0
Average Remove Copies: 0.0
Experimenting with list size 100000
Running experiments |#############################| 3/3
Average Time: 0.0779 seconds
Average Capacity: 131072.0
Average Resizes: 17.0
Average Append Copies: 131071.0
Average Remove Copies: 0.0
Experimenting with list size 1000000
Running experiments |#############################| 3/3
Average Time: 0.8571 seconds
Average Capacity: 1048576.0
Average Resizes: 20.0
Average Append Copies: 1048575.0
Average Remove Copies: 0.0
=================================================
Growth_type=relative, growth_value=1.5, prob_remove=0.0
=================================================
Experimenting with list size 10000
Running experiments |#############################| 3/3
Average Time: 0.0095 seconds
Average Capacity: 12138.0
Average Resizes: 23.0
Average Append Copies: 24284.0
Average Remove Copies: 0.0
Experimenting with list size 100000
Running experiments |#############################| 3/3
Average Time: 0.1040 seconds
Average Capacity: 138255.0
Average Resizes: 29.0
Average Append Copies: 276521.0
Average Remove Copies: 0.0
Experimenting with list size 1000000
Running experiments |#############################| 3/3
Average Time: 1.1170 seconds
Average Capacity: 1049869.0
Average Resizes: 34.0
Average Append Copies: 2099753.0
Average Remove Copies: 0.0
=================================================
Growth_type=fixed, growth_value=1024, prob_remove=0.0
```

```
==================================================
Experimenting with list size 10000
Running experiments |#############################| 3/3
Average Time: 0.0133 seconds
Average Capacity: 10241.0
Average Resizes: 10.0
Average Append Copies: 46090.0
Average Remove Copies: 0.0
Experimenting with list size 100000
Running experiments |#############################| 3/3
Average Time: 0.8712 seconds
Average Capacity: 100353.0
Average Resizes: 98.0
Average Append Copies: 4867170.0
Average Remove Copies: 0.0
Experimenting with list size 1000000
Running experiments |#############################| 3/3
Average Time: 110.5475 seconds
Average Capacity: 1000449.0
Average Resizes: 977.0
Average Append Copies: 488219601.0
Average Remove Copies: 0.0
==================================================
Growth_type=fixed, growth_value=8192, prob_remove=0.0
==================================================
Experimenting with list size 10000
Running experiments |#############################| 3/3
Average Time: 0.0069 seconds
Average Capacity: 16385.0
Average Resizes: 2.0
Average Append Copies: 8194.0
Average Remove Copies: 0.0
Experimenting with list size 100000
Running experiments |#############################| 3/3
Average Time: 0.1675 seconds
Average Capacity: 106497.0
Average Resizes: 13.0
Average Append Copies: 638989.0
Average Remove Copies: 0.0
Experimenting with list size 1000000
Running experiments |#############################| 3/3
Average Time: 14.4988 seconds
Average Capacity: 1007617.0
Average Resizes: 123.0
Average Append Copies: 61464699.0
Average Remove Copies: 0.0
==================================================
Growth_type=fixed, growth_value=32768, prob_remove=0.0
==================================================
Experimenting with list size 10000
Running experiments |#############################| 3/3
Average Time: 0.0056 seconds
Average Capacity: 32769.0
Average Resizes: 1.0
```

Average Append Copies: 1.0
Average Remove Copies: 0.0
Experimenting with list size 100000
Running experiments |##############################| 3/3
Average Time: 0.0920 seconds
Average Capacity: 131073.0
Average Resizes: 4.0
Average Append Copies: 196612.0
Average Remove Copies: 0.0
Experimenting with list size 1000000
Running experiments |##############################| 3/3
Average Time: 4.1743 seconds
Average Capacity: 1015809.0
Average Resizes: 31.0
Average Append Copies: 15237151.0
Average Remove Copies: 0.0
~/Desktop/Lab3

WITH REMOVE

===
Growth_type=relative, growth_value=2, prob_remove=0.001
===
Experimenting with list size 10000
Running experiments |##############################| 3/3
Average Time: 0.0143 seconds
Average Capacity: 16384.0
Average Resizes: 14.0
Average Append Copies: 16383.0
Average Remove Copies: 23680.666666666668
Experimenting with list size 100000
Running experiments |##############################| 3/3
Average Time: 0.8629 seconds
Average Capacity: 131072.0
Average Resizes: 17.0
Average Append Copies: 131071.0
Average Remove Copies: 2722906.3333333335
Experimenting with list size 1000000
Running experiments |##############################| 3/3
Average Time: 123.9165 seconds
Average Capacity: 1048576.0
Average Resizes: 20.0
Average Append Copies: 1048575.0
Average Remove Copies: 289685173.3333333
===
Growth_type=relative, growth_value=1.5, prob_remove=0.001
===
Experimenting with list size 10000
Running experiments |##############################| 3/3
Average Time: 0.0180 seconds
Average Capacity: 12138.0
Average Resizes: 23.0

Average Append Copies: 24284.0
Average Remove Copies: 19913.666666666668
Experimenting with list size 100000
Running experiments |############################| 3/3
Average Time: 1.0893 seconds
Average Capacity: 138255.0
Average Resizes: 29.0
Average Append Copies: 276521.0
Average Remove Copies: 2734661.6666666665
Experimenting with list size 1000000
Running experiments |############################| 3/3
Average Time: 121.5105 seconds
Average Capacity: 1049869.0
Average Resizes: 34.0
Average Append Copies: 2099753.0
Average Remove Copies: 297337707.0
==
Growth_type=fixed, growth_value=1024, prob_remove=0.001
==
Experimenting with list size 10000
Running experiments |############################| 3/3
Average Time: 0.0242 seconds
Average Capacity: 10241.0
Average Resizes: 10.0
Average Append Copies: 46090.0
Average Remove Copies: 23261.333333333332
Experimenting with list size 100000
Running experiments |############################| 3/3
Average Time: 1.9502 seconds
Average Capacity: 100353.0
Average Resizes: 98.0
Average Append Copies: 4867170.0
Average Remove Copies: 2430357.6666666665
Experimenting with list size 1000000
Running experiments |############################| 3/3
Average Time: 223.6520 seconds
Average Capacity: 999425.0
Average Resizes: 976.0
Average Append Copies: 487220176.0
Average Remove Copies: 289296079.0
==
Growth_type=fixed, growth_value=8192, prob_remove=0.001
==
Experimenting with list size 10000
Running experiments |############################| 3/3
Average Time: 0.0151 seconds
Average Capacity: 16385.0
Average Resizes: 2.0
Average Append Copies: 8194.0
Average Remove Copies: 32920.666666666664
Experimenting with list size 100000
Running experiments |############################| 3/3
Average Time: 0.9244 seconds
Average Capacity: 106497.0

Average Resizes: 13.0
Average Append Copies: 638989.0
Average Remove Copies: 2682984.3333333335
Experimenting with list size 1000000
Running experiments |############################| 3/3
Average Time: 119.4470 seconds
Average Capacity: 999425.0
Average Resizes: 122.0
Average Append Copies: 60465274.0
Average Remove Copies: 296219825.0
==
Growth_type=fixed, growth_value=32768, prob_remove=0.001
==
Experimenting with list size 10000
Running experiments |############################| 3/3
Average Time: 0.0121 seconds
Average Capacity: 32769.0
Average Resizes: 1.0
Average Append Copies: 1.0
Average Remove Copies: 24990.0
Experimenting with list size 100000
Running experiments |############################| 3/3
Average Time: 0.8473 seconds
Average Capacity: 131073.0
Average Resizes: 4.0
Average Append Copies: 196612.0
Average Remove Copies: 2712666.6666666665
Experimenting with list size 1000000
Running experiments |############################| 3/3
Average Time: 108.3746 seconds
Average Capacity: 1015809.0
Average Resizes: 31.0
Average Append Copies: 15237151.0
Average Remove Copies: 300194039.6666667
~/Desktop/Lab3