*HIGH LOAD FIRST FIT – int**

Highlighted cells in **purple** indicate change in result for the first repeated test.
Highlighted cells in **orange** indicate change in result for the second repeated test.

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **High Load,** a total of **50000 allocs and deallocs** were executed and for every period of 5000 allocs/deallocs the RSS and Time were recorded.
Interval = 5000
50000 / 5000 = 10 intervals
Numbers pointed by int* memory addresses range from 0 -> 50000
In use at exit = **2924344 bytes** in **100004 blocks**
Total heap usage = **100020 allocs**, **16 frees**, **3448624 bytes allocated**

RUN 1

Total time taken= **4074 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4504**	22	1	**8136**	4073	1
1944	2	2	**4768**	424	2	**8184**	4073	2
1944	4	3	**5296**	825	3	**8184**	4073	3
2128	6	4	**5560**	1227	4	**8184**	4073	4
2392	9	5	**5824**	1629	5	**8184**	4073	5
2656	11	6	**6360**	2040	6	**8184**	4073	6
3184	13	7	**6624**	2448	7	**8184**	4073	7
3448	15	8	**7100**	2851	8	**8184**	4074	8
3712	18	9	**7300**	3258	9	**8184**	4074	9
4240	20	10	**7652**	3665	10	**8184**	4074	10

RUN 2

Total time taken= **4187 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4508**	23	1	**8144**	4186	1
1944	3	2	**4772**	456	2	**8188**	4187	2
1944	5	3	**5300**	878	3	**8188**	4187	3
2132	7	4	**5564**	1280	4	**8188**	4187	4
2396	9	5	**5828**	1692	5	**8188**	4187	5
2660	12	6	**6308**	2109	6	**8188**	4187	6
3188	14	7	**6604**	2536	7	**8188**	4187	7
3452	16	8	**7088**	2958	8	**8188**	4187	8
3716	18	9	**7304**	3370	9	**8188**	4187	9
4244	21	10	**7656**	3777	10	**8188**	4187	10

RUN 3

Total time taken= **4173 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4508**	22	1	**8140**	4172	1
1944	3	2	**4772**	432	2	**8188**	4172	2
1944	5	3	**5300**	846	3	**8188**	4172	3
2132	7	4	**5564**	1260	4	**8188**	4172	4
2396	9	5	**5828**	1675	5	**8188**	4173	5
2660	11	6	**6320**	2089	6	**8188**	4173	6
3188	13	7	**6612**	2505	7	**8188**	4173	7
3452	16	8	**7092**	2920	8	**8188**	4173	8
3716	18	9	**7304**	3337	9	**8188**	4173	9
4244	20	10	**7656**	3755	10	**8188**	4173	10

*HIGH LOAD BEST FIT – int**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **High Load,** a total of **50000 allocs and deallocs** were executed and for every period of 5000 allocs/deallocs the RSS and Time were recorded.
Interval = 5000
50000 / 5000 = 10 intervals
Numbers pointed by int* memory addresses range from 0 -> 50000
In use at exit = **2724352 bytes** in **91671 blocks**
Total heap usage = **91687 allocs**, **16 frees**, **3248632 bytes allocated**

RUN 1

Total time taken= **19919 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4508**	24	1	**7184**	19919	1
1944	3	2	**4948**	2102	2	**7184**	19919	2
1944	5	3	**5240**	4104	3	**7376**	19919	3
2132	7	4	**5428**	5970	4	**7376**	19919	4
2396	10	5	**5652**	7732	5	**7376**	19919	5
2660	12	6	**6152**	9388	6	**7376**	19919	6
3188	14	7	**6348**	11666	7	**7376**	19919	7
3452	16	8	**6672**	13776	8	**7376**	19919	8
3716	19	9	**6700**	15735	9	**7376**	19919	9
4244	21	10	**6920**	17798	10	**7376**	19919	10

RUN 2

Total time taken= **19843 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4508**	22	1	**7184**	19843	1
1944	2	2	**4952**	2095	2	**7184**	19843	2
1944	5	3	**5244**	4064	3	**7376**	19843	3
2132	7	4	**5420**	5926	4	**7376**	19843	4
2396	9	5	**5652**	7682	5	**7376**	19843	5
2660	11	6	**6152**	9333	6	**7376**	19843	6
3188	13	7	**6344**	11590	7	**7376**	19843	7
3452	15	8	**6672**	13691	8	**7376**	19843	8
3716	17	9	**6708**	15641	9	**7376**	19843	9
4244	20	10	**6920**	17684	10	**7376**	19843	10

RUN 3

Total time taken= **20419 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4508**	22	1	**7348**	20418	1
1944	2	2	**4940**	2168	2	**7348**	20418	2
1944	4	3	**5228**	4197	3	**7348**	20418	3
2132	7	4	**5536**	6112	4	**7348**	20418	4
2396	9	5	**5788**	7919	5	**7348**	20418	5
2660	11	6	**6184**	9615	6	**7348**	20419	6
3188	13	7	**6376**	11949	7	**7376**	20419	7
3452	15	8	**6692**	14117	8	**7376**	20419	8
3716	18	9	**6692**	16133	9	**7376**	20419	9
4244	20	10	**6920**	18250	10	**7376**	20419	10

*HIGH LOAD WORST FIT – int**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **High Load,** a total of **50000 allocs and deallocs** were executed and for every period of 5000 allocs/deallocs the RSS and Time were recorded.
Interval = 5000
50000 / 5000 = 10 intervals
Numbers pointed by int* memory addresses range from 0 -> 50000
In use at exit = **2924344 bytes** in **100004 blocks**
Total heap usage = **100020 allocs**, **16 frees**, **3448624 bytes allocated**

RUN 1

Total time taken= **22019 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4508**	23	1	**8716**	22018	1
1944	2	2	**5036**	1986	2	**8716**	22018	2
1944	5	3	**5376**	3752	3	**8716**	22018	3
2132	7	4	**5744**	5905	4	**8868**	22018	4
2396	9	5	**6352**	8227	5	**8868**	22018	5
2660	11	6	**6736**	10548	6	**8868**	22018	6
3188	14	7	**7244**	12866	7	**8868**	22018	7
3452	16	8	**7636**	15131	8	**8868**	22018	8
3716	18	9	**7940**	17511	9	**8868**	22019	9
4244	20	10	**8452**	19826	10	**8868**	22019	10

RUN 2

Total time taken= **21742 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4504**	22	1	**8712**	21741	1
1944	2	2	**5032**	1974	2	**8712**	21741	2
1944	4	3	**5372**	3729	3	**8712**	21741	3
2128	6	4	**5736**	5870	4	**8864**	21741	4
2392	9	5	**6348**	8154	5	**8864**	21741	5
2656	11	6	**6740**	10435	6	**8864**	21741	6
3184	13	7	**7248**	12734	7	**8864**	21742	7
3448	15	8	**7636**	14982	8	**8864**	21742	8
3712	17	9	**7936**	17299	9	**8864**	21742	9
4240	20	10	**8448**	19555	10	**8864**	21742	10

RUN 3

Total time taken= **21821 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4508**	23	1	**8712**	21820	1
1944	3	2	**5036**	1984	2	**8712**	21820	2
1944	5	3	**5372**	3740	3	**8712**	21820	3
2132	7	4	**5736**	5882	4	**8868**	21821	4
2396	9	5	**6352**	8178	5	**8868**	21821	5
2660	12	6	**6736**	10461	6	**8868**	21821	6
3188	14	7	**7240**	12764	7	**8868**	21821	7
3452	16	8	**7636**	15023	8	**8868**	21821	8
3716	18	9	**7936**	17348	9	**8868**	21821	9
4244	20	10	**8448**	19630	10	**8868**	21821	10

*HIGH LOAD FIRST FIT – double**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **High Load,** a total of **50000 allocs and deallocs** were executed and for every period of 5000 allocs/deallocs the RSS and Time were recorded.
Interval = 5000
50000 / 5000 = 10 intervals
Numbers pointed by double* memory addresses range from 0 -> 50000 with 0.1, 0.3, 0.6, 0.8, 0.9 decimal values.
In use at exit = **2724352 bytes** in **91671 blocks**
Total heap usage = **91687 allocs**, **16 frees**, **3248632 bytes allocated**

RUN 1

Total time taken= **11589 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4508**	24	1	**7788**	11589	1
1944	3	2	**4772**	521	2	**7932**	11589	2
1944	5	3	**5036**	1193	3	**7932**	11589	3
2132	7	4	**5460**	2038	4	**7932**	11589	4
2396	9	5	**5672**	3023	5	**7932**	11589	5
2660	12	6	**6008**	4168	6	**7932**	11589	6
3188	14	7	**6360**	5455	7	**7932**	11589	7
3452	17	8	**6904**	6846	8	**7932**	11589	8
3716	19	9	**7116**	8335	9	**7932**	11589	9
4244	21	10	**7476**	9936	10	**7932**	11589	10

RUN 2

Total time taken= **11452 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4508**	22	1	**7772**	11451	1
1944	2	2	**4772**	499	2	**7932**	11451	2
1944	5	3	**5036**	1144	3	**7932**	11451	3
2132	7	4	**5300**	1957	4	**7932**	11451	4
2396	9	5	**5672**	2939	5	**7932**	11451	5
2660	11	6	**6036**	4081	6	**7932**	11451	6
3188	13	7	**6328**	5351	7	**7932**	11451	7
3452	15	8	**6864**	6733	8	**7932**	11452	8
3716	18	9	**7116**	8218	9	**7932**	11452	9
4244	20	10	**7488**	9793	10	**7932**	11452	10

RUN 3

Total time taken= **11448 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1944	0	1	**4508**	22	1	**7932**	11447	1
1944	2	2	**4772**	500	2	**7932**	11447	2
1944	4	3	**5036**	1145	3	**7932**	11447	3
2132	6	4	**5300**	1959	4	**7932**	11447	4
2396	8	5	**5672**	2937	5	**7932**	11447	5
2660	11	6	**6032**	4072	6	**7932**	11447	6
3188	13	7	**6324**	5343	7	**7932**	11447	7
3452	15	8	**6852**	6727	8	**7932**	11447	8
3716	17	9	**7116**	8216	9	**7932**	11448	9
4244	19	10	**7488**	9795	10	**7932**	11448	10

*HIGH LOAD BEST FIT – double**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **High Load,** a total of **50000 allocs and deallocs** were executed and for every period of 5000 allocs/deallocs the RSS and Time were recorded.
Interval = 5000
50000 / 5000 = 10 intervals
Numbers pointed by double* memory addresses range from 0 -> 50000 with 0.1, 0.3, 0.6, 0.8, 0.9 decimal values.
In use at exit = **2724352 bytes** in **91671 blocks**
Total heap usage = **91687 allocs**, **16 frees**, **3248632 bytes allocated**

RUN 1

Total time taken= **20011 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4508**	23	1	**7776**	20010	1
1948	3	2	**4508**	1521	2	**7776**	20010	2
1948	5	3	**4808**	2837	3	**7776**	20010	3
2132	7	4	**5052**	4399	4	**7776**	20010	4
2396	10	5	**5460**	6329	5	**7776**	20010	5
2660	12	6	**5860**	8392	6	**7776**	20010	6
3188	14	7	**6204**	10554	7	**7808**	20010	7
3452	16	8	**6604**	12772	8	**7808**	20010	8
3716	18	9	**7020**	15087	9	**7808**	20010	9
4244	21	10	**7272**	17495	10	**7808**	20011	10

RUN 2

Total time taken= **20134 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4508**	24	1	**7720**	20133	1
1948	3	2	**4508**	1544	2	**7720**	20133	2
1948	5	3	**4808**	2845	3	**7720**	20133	3
2132	8	4	**5052**	4410	4	**7720**	20133	4
2396	10	5	**5456**	6367	5	**7720**	20133	5
2660	12	6	**5740**	8430	6	**7808**	20133	6
3188	15	7	**6264**	10586	7	**7808**	20133	7
3452	17	8	**6632**	12828	8	**7808**	20133	8
3716	19	9	**6952**	15156	9	**7808**	20134	9
4244	22	10	**7192**	17573	10	**7808**	20134	10

RUN 3

Total time taken= **19850 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4508**	22	1	**7768**	19850	1
1948	2	2	**4508**	1492	2	**7768**	19850	2
1948	4	3	**4808**	2770	3	**7768**	19850	3
2132	7	4	**5072**	4312	4	**7768**	19850	4
2396	9	5	**5476**	6241	5	**7768**	19850	5
2660	11	6	**5848**	8289	6	**7768**	19850	6
3188	13	7	**6168**	10411	7	**7808**	19850	7
3452	15	8	**6728**	12625	8	**7808**	19850	8
3716	18	9	**7020**	14975	9	**7808**	19850	9
4244	20	10	**7260**	17369	10	**7808**	19850	10

*HIGH LOAD WORST FIT – double**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **High Load,** a total of **50000 allocs and deallocs** were executed and for every period of 5000 allocs/deallocs the RSS and Time were recorded.
Interval = 5000
50000 / 5000 = 10 intervals
Numbers pointed by double* memory addresses range from 0 -> 50000 with 0.1, 0.3, 0.6, 0.8, 0.9 decimal values.
In use at exit = **2924344 bytes** in **100004 blocks**
Total heap usage = **100020 allocs**, **16 frees**, **3448624 bytes allocated**

RUN 1

Total time taken= **19958 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4508**	23	1	**8188**	19957	1
1948	2	2	**5036**	1622	2	**8188**	19957	2
1948	4	3	**5332**	3130	3	**8408**	19957	3
2132	7	4	**5700**	5096	4	**8408**	19957	4
2396	9	5	**6196**	7214	5	**8408**	19957	5
2660	11	6	**6440**	9198	6	**8408**	19957	6
3188	14	7	**6804**	11416	7	**8408**	19958	7
3452	16	8	**7416**	13565	8	**8408**	19958	8
3716	18	9	**7680**	15615	9	**8408**	19958	9
4244	20	10	**7924**	17745	10	**8408**	19958	10

RUN 2

Total time taken= **20448 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4508**	24	1	**8220**	20447	1
1948	3	2	**5036**	1680	2	**8220**	20447	2
1948	5	3	**5344**	3214	3	**8408**	20447	3
2132	7	4	**5692**	5230	4	**8408**	20447	4
2396	10	5	**6192**	7400	5	**8408**	20447	5
2660	12	6	**6692**	9422	6	**8408**	20447	6
3188	14	7	**7036**	11710	7	**8408**	20447	7
3452	17	8	**7412**	13955	8	**8408**	20447	8
3716	19	9	**7708**	16039	9	**8408**	20448	9
4244	21	10	**7956**	18187	10	**8408**	20448	10

RUN 3

Total time taken= **20032 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4508**	22	1	**8180**	20031	1
1948	2	2	**5036**	1620	2	**8408**	20031	2
1948	4	3	**5332**	3120	3	**8408**	20031	3
2132	6	4	**5700**	5082	4	**8408**	20031	4
2396	8	5	**6196**	7201	5	**8408**	20031	5
2660	11	6	**6436**	9162	6	**8408**	20032	6
3188	12	7	**6808**	11382	7	**8408**	20031	7
3452	15	8	**7416**	13538	8	**8408**	20031	8
3716	17	9	**7684**	15595	9	**8408**	20031	9
4244	20	10	**7916**	17813	10	**8408**	20031	10

*HIGH LOAD FIRST FIT – char***

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **High Load,** a total of **50000 allocs and deallocs** were executed and for every period of 5000 allocs/deallocs the RSS and Time were recorded.
Interval = 5000
50000 / 5000 = 10 intervals
char* strings sourced from *Collins Scrabble Words (2015).txt* input file
In use at exit = **2724352 bytes** in **91671 blocks**
Total heap usage= **141741 allocs**, **50070 frees**, **5012435 bytes allocated**

RUN 1

Total time taken= **11493 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4512**	24	1	**7968**	11492	1
1948	2	2	**4776**	509	2	**7968**	11492	2
1948	5	3	**5040**	1159	3	**7968**	11493	3
2136	7	4	**5304**	1976	4	**7968**	11493	4
2400	9	5	**5740**	2961	5	**7968**	11493	5
2664	12	6	**6100**	4103	6	**7968**	11493	6
3192	14	7	**6400**	5377	7	**8004**	11493	7
3456	16	8	**6924**	6760	8	**8004**	11493	8
3720	18	9	**7188**	8255	9	**8004**	11493	9
4248	21	10	**7600**	9833	10	**8004**	11493	10

RUN 2

Total time taken= **11523 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4512**	24	1	**7868**	11522	1
1948	3	2	**4776**	506	2	**8004**	11522	2
1948	5	3	**5040**	1154	3	**8004**	11522	3
2136	7	4	**5304**	1972	4	**8004**	11522	4
2400	9	5	**5740**	2960	5	**8004**	11523	5
2664	12	6	**6100**	4108	6	**8004**	11523	6
3192	14	7	**6400**	5390	7	**8004**	11523	7
3456	16	8	**6928**	6778	8	**8004**	11523	8
3720	18	9	**7156**	8266	9	**8004**	11523	9
4248	20	10	**7640**	9846	10	**8004**	11523	10

RUN 3

Total time taken= **11549 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4512**	23	1	**7880**	11548	1
1948	2	2	**4776**	513	2	**7880**	11548	2
1948	4	3	**5040**	1166	3	**8004**	11548	3
2136	7	4	**5304**	1997	4	**8004**	11548	4
2400	9	5	**5740**	2984	5	**8004**	11548	5
2664	11	6	**6104**	4124	6	**8004**	11549	6
3192	13	7	**6404**	5399	7	**8004**	11549	7
3456	15	8	**6932**	6817	8	**8004**	11549	8
3720	18	9	**7164**	8300	9	**8004**	11549	9
4248	20	10	**7480**	9873	10	**8004**	11549	10

*HIGH LOAD BEST FIT – char***

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **High Load,** a total of **50000 allocs and deallocs** were executed and for every period of 5000 allocs/deallocs the RSS and Time were recorded.
Interval = 5000
50000 / 5000 = 10 intervals
char* strings sourced from *Collins Scrabble Words (2015).txt* input file
In use at exit = **2724352 bytes** in **91671 blocks**
Total heap usage= **141741 allocs**, **50070 frees**, **5012435 bytes allocated**

RUN 1

Total time taken= **19697 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4512**	27	1	**7748**	19697	1
1948	3	2	**4776**	1525	2	**7748**	19697	2
1948	5	3	**4876**	2815	3	**7748**	19697	3
2136	8	4	**5132**	4350	4	**7748**	19697	4
2400	10	5	**5536**	6272	5	**7876**	19697	5
2664	13	6	**5808**	8298	6	**7876**	19697	6
3192	15	7	**6244**	10404	7	**7876**	19697	7
3456	18	8	**6804**	12587	8	**7876**	19697	8
3720	20	9	**6968**	14860	9	**7876**	19697	9
4248	23	10	**7484**	17224	10	**7876**	19697	10

RUN 2

Total time taken= **20007 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4508**	23	1	**7792**	20006	1
1948	2	2	**4772**	1510	2	**7792**	20006	2
1948	4	3	**4872**	2813	3	**7792**	20006	3
2132	6	4	**5128**	4386	4	**7792**	20006	4
2396	9	5	**5524**	6335	5	**7792**	20006	5
2660	11	6	**5788**	8404	6	**7872**	20006	6
3188	13	7	**6308**	10554	7	**7872**	20007	7
3452	15	8	**6696**	12782	8	**7872**	20007	8
3716	17	9	**7084**	15100	9	**7872**	20007	9
4244	20	10	**7340**	17502	10	**7872**	20007	10

RUN 3

Total time taken= **20104 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4512**	23	1	**7792**	20104	1
1948	2	2	**4776**	1542	2	**7792**	20104	2
1948	4	3	**4876**	2851	3	**7792**	20104	3
2136	6	4	**5120**	4428	4	**7792**	20104	4
2400	8	5	**5520**	6386	5	**7792**	20104	5
2664	10	6	**5792**	8461	6	**7876**	20104	6
3192	13	7	**6320**	10612	7	**7876**	20104	7
3456	15	8	**6704**	12843	8	**7876**	20104	8
3720	17	9	**7012**	15162	9	**7876**	20104	9
4248	19	10	**7264**	17579	10	**7876**	20104	10

*HIGH LOAD WORST FIT – char***

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **High Load,** a total of **50000 allocs and deallocs** were executed and for every period of 5000 allocs/deallocs the RSS and Time were recorded.
Interval = 5000
50000 / 5000 = 10 intervals
char* strings sourced from *Collins Scrabble Words (2015).txt* input file
In use at exit = **2924344 bytes** in **100004 blocks**
Total heap usage= **150074 allocs**, **50070 frees**, **5212427 bytes allocated**

RUN 1

Total time taken= **20555 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4512**	25	1	**8268**	20554	1
1948	2	2	**5040**	1643	2	**8268**	20554	2
1948	5	3	**5548**	3177	3	**8476**	20554	3
2136	7	4	**5932**	5240	4	**8476**	20554	4
2400	10	5	**6240**	7414	5	**8476**	20554	5
2664	12	6	**6712**	9453	6	**8476**	20554	6
3192	14	7	**7116**	11733	7	**8476**	20554	7
3456	17	8	**7484**	13952	8	**8476**	20555	8
3720	19	9	**7748**	16079	9	**8476**	20555	9
4248	22	10	**8004**	18279	10	**8476**	20555	10

RUN 2

Total time taken= **20819 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4512**	24	1	**8264**	20817	1
1948	2	2	**5040**	1659	2	**8264**	20817	2
1948	4	3	**5552**	3203	3	**8476**	20818	3
2136	7	4	**5932**	5215	4	**8476**	20818	4
2400	9	5	**6240**	7424	5	**8476**	20818	5
2664	11	6	**6680**	9436	6	**8476**	20818	6
3192	13	7	**7016**	11764	7	**8476**	20818	7
3456	16	8	**7428**	13962	8	**8476**	20818	8
3720	18	9	**7748**	16097	9	**8476**	20819	9
4248	20	10	**8000**	18336	10	**8476**	20819	10

RUN 3

Total time taken= **20282 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**4512**	23	1	**8268**	20281	1
1948	2	2	**5040**	1652	2	**8268**	20281	2
1948	4	3	**5552**	3182	3	**8476**	20281	3
2136	6	4	**5928**	5175	4	**8476**	20281	4
2400	8	5	**6244**	7346	5	**8476**	20281	5
2664	11	6	**6684**	9355	6	**8476**	20282	6
3192	13	7	**7024**	11614	7	**8476**	20282	7
3456	15	8	**7432**	13795	8	**8476**	20282	8
3720	17	9	**7756**	15893	9	**8476**	20282	9
4248	20	10	**8004**	18044	10	**8476**	20282	10

*MEDIUM LOAD FIRST FIT – int**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Medium Load,** a total of **20000 allocs and deallocs** were executed and for every period of 2000 allocs/deallocs the RSS and Time were recorded.
Interval = 2000
20000 / 2000 = 10 intervals
Numbers pointed by int* memory addresses range from 0 -> 20000
In use at exit = **1222200 bytes** in **40004 blocks**
Total heap usage = **40019 allocs**, **15 frees**, **1484336 bytes allocated**

RUN 1

Total time taken= **681 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	10	1	**3752**	680	1
1948	1	2	**2660**	77	2	**3752**	680	2
1948	2	3	**2660**	143	3	**3752**	680	3
1948	3	4	**2924**	210	4	**3752**	681	4
1948	4	5	**2924**	280	5	**3752**	681	5
1948	5	6	**3188**	347	6	**3752**	681	6
1948	6	7	**3188**	414	7	**3752**	681	7
2132	7	8	**3452**	481	8	**3752**	681	8
2132	8	9	**3716**	548	9	**3752**	681	9
2396	9	10	**3752**	614	10	**3752**	681	10

RUN 2

Total time taken= **673 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	10	1	**3752**	673	1
1948	1	2	**2660**	77	2	**3752**	673	2
1948	2	3	**2660**	143	3	**3752**	673	3
1948	3	4	**2924**	210	4	**3752**	673	4
1948	4	5	**2924**	276	5	**3752**	673	5
1948	5	6	**3188**	342	6	**3752**	673	6
1948	6	7	**3188**	409	7	**3752**	673	7
2132	7	8	**3452**	475	8	**3752**	673	8
2132	8	9	**3716**	541	9	**3752**	673	9
2396	9	10	**3752**	607	10	**3752**	673	10

RUN 3

Total time taken= **677 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**3752**	677	1
1948	1	2	**2660**	76	2	**3752**	677	2
1948	2	3	**2660**	142	3	**3752**	677	3
1948	3	4	**2924**	209	4	**3752**	677	4
1948	4	5	**2924**	277	5	**3752**	677	5
1948	5	6	**3188**	343	6	**3752**	677	6
1948	6	7	**3188**	411	7	**3752**	677	7
2132	6	8	**3452**	477	8	**3752**	677	8
2132	7	9	**3716**	544	9	**3752**	677	9
2396	8	10	**3752**	611	10	**3752**	678	10

*MEDIUM LOAD BEST FIT – int**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Medium Load,** a total of **20000 allocs and deallocs** were executed and for every period of 2000 allocs/deallocs the RSS and Time were recorded.
Interval = 2000
20000 / 2000 = 10 intervals
Numbers pointed by int* memory addresses range from 0 -> 20000
In use at exit = **1142208 bytes** in **36671 blocks**
Total heap usage = **36686 allocs**, **15 frees**, **1404344 bytes allocated**

RUN 1

Total time taken= **3153 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**3516**	3153	1
1948	1	2	**2660**	341	2	**3516**	3153	2
1948	2	3	**2660**	655	3	**3516**	3153	3
1948	3	4	**2924**	951	4	**3516**	3153	4
1948	4	5	**2924**	1230	5	**3516**	3153	5
1948	5	6	**3188**	1492	6	**3516**	3153	6
1948	6	7	**3188**	1846	7	**3688**	3153	7
2132	6	8	**3332**	2179	8	**3688**	3153	8
2132	7	9	**3332**	2489	9	**3688**	3153	9
2396	8	10	**3516**	2814	10	**3688**	3153	10

RUN 2

Total time taken= **3186 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**3516**	3186	1
1948	1	2	**2660**	340	2	**3516**	3186	2
1948	2	3	**2660**	657	3	**3516**	3186	3
1948	3	4	**2924**	957	4	**3516**	3186	4
1948	4	5	**2924**	1236	5	**3516**	3186	5
1948	4	6	**3188**	1501	6	**3516**	3186	6
1948	5	7	**3188**	1860	7	**3688**	3186	7
2132	6	8	**3336**	2200	8	**3688**	3186	8
2132	7	9	**3336**	2511	9	**3688**	3186	9
2396	8	10	**3516**	2840	10	**3688**	3186	10

RUN 3

Total time taken= **3194 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**3516**	3194	1
1948	1	2	**2660**	343	2	**3516**	3194	2
1948	2	3	**2660**	665	3	**3516**	3194	3
1948	2	4	**2924**	966	4	**3516**	3194	4
1948	3	5	**2924**	1247	5	**3516**	3194	5
1948	4	6	**3188**	1510	6	**3516**	3194	6
1948	5	7	**3188**	1866	7	**3688**	3194	7
2132	6	8	**3332**	2201	8	**3688**	3194	8
2132	7	9	**3332**	2516	9	**3688**	3194	9
2396	8	10	**3516**	2851	10	**3688**	3194	10

*MEDIUM LOAD WORST FIT – int**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Medium Load,** a total of **20000 allocs and deallocs** were executed and for every period of 2000 allocs/deallocs the RSS and Time were recorded.
Interval = 2000
20000 / 2000 = 10 intervals
Numbers pointed by int* memory addresses range from 0 -> 20000
In use at exit = **1222200 bytes** in **40004 blocks**
Total heap usage = **40019 allocs**, **15 frees**, **1484336 bytes allocated**

RUN 1

Total time taken= **3460 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**4264**	3460	1
1948	1	2	**2660**	320	2	**4264**	3460	2
1948	2	3	**2924**	599	3	**4264**	3460	3
1948	3	4	**2924**	939	4	**4264**	3460	4
1948	4	5	**3188**	1302	5	**4288**	3460	5
1948	5	6	**3452**	1664	6	**4288**	3460	6
1948	6	7	**3624**	2030	7	**4288**	3460	7
2132	6	8	**3772**	2388	8	**4288**	3460	8
2132	7	9	**3772**	2756	9	**4288**	3460	9
2396	8	10	**4020**	3113	10	**4288**	3460	10

RUN 2

Total time taken= **3591 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2392**	9	1	**4260**	3590	1
1948	1	2	**2656**	336	2	**4260**	3590	2
1948	2	3	**2920**	632	3	**4260**	3590	3
1948	3	4	**2920**	992	4	**4260**	3590	4
1948	4	5	**3184**	1370	5	**4284**	3590	5
1948	4	6	**3448**	1743	6	**4284**	3591	6
1948	5	7	**3580**	2121	7	**4284**	3591	7
2128	6	8	**3768**	2489	8	**4284**	3591	8
2128	7	9	**3768**	2867	9	**4284**	3591	9
2392	8	10	**4016**	3234	10	**4284**	3591	10

RUN 3

Total time taken= **3499 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**4264**	3499	1
1948	1	2	**2660**	326	2	**4264**	3499	2
1948	2	3	**2924**	612	3	**4264**	3499	3
1948	3	4	**2924**	954	4	**4264**	3499	4
1948	4	5	**3188**	1318	5	**4288**	3499	5
1948	5	6	**3452**	1683	6	**4288**	3499	6
1948	6	7	**3616**	2049	7	**4288**	3499	7
2132	6	8	**3772**	2410	8	**4288**	3499	8
2132	7	9	**3772**	2779	9	**4288**	3499	9
2396	8	10	**4020**	3139	10	**4288**	3499	10

*MEDIUM LOAD FIRST FIT – double**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Medium Load,** a total of **20000 allocs and deallocs** were executed and for every period of 2000 allocs/deallocs the RSS and Time were recorded.
Interval = 2000
20000 / 2000 = 10 intervals
Numbers pointed by double* memory addresses range from 0 -> 20000 with 0.1, 0.3, 0.6, 0.8, 0.9 decimal values.
In use at exit = **1142208 bytes** in **36671 blocks**
Total heap usage = **36686 allocs**, **15 frees**, **1404344 bytes allocated**

RUN 1

Total time taken= **1834 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2392**	10	1	**3712**	1834	1
1948	1	2	**2656**	91	2	**3712**	1834	2
1948	2	3	**2656**	197	3	**3712**	1834	3
1948	3	4	**2920**	326	4	**3712**	1834	4
1948	4	5	**2920**	480	5	**3712**	1834	5
1948	5	6	**3184**	660	6	**3712**	1834	6
1948	6	7	**3184**	866	7	**3712**	1834	7
2128	7	8	**3448**	1086	8	**3712**	1834	8
2128	8	9	**3448**	1320	9	**3712**	1834	9
2392	9	10	**3712**	1571	10	**3712**	1834	10

RUN 2

Total time taken= **1898 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**3716**	1897	1
1948	1	2	**2660**	90	2	**3716**	1897	2
1948	2	3	**2660**	198	3	**3716**	1897	3
1948	2	4	**2924**	335	4	**3716**	1897	4
1948	3	5	**2924**	497	5	**3716**	1897	5
1948	4	6	**3188**	684	6	**3716**	1898	6
1948	5	7	**3188**	893	7	**3716**	1898	7
2132	6	8	**3452**	1120	8	**3716**	1898	8
2132	7	9	**3452**	1364	9	**3716**	1898	9
2396	8	10	**3716**	1624	10	**3716**	1898	10

RUN 3

Total time taken= **1892 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**3716**	1892	1
1948	1	2	**2660**	88	2	**3716**	1892	2
1948	2	3	**2660**	195	3	**3716**	1892	3
1948	2	4	**2924**	328	4	**3716**	1892	4
1948	3	5	**2924**	488	5	**3716**	1892	5
1948	4	6	**3188**	675	6	**3716**	1892	6
1948	5	7	**3188**	885	7	**3716**	1892	7
2132	6	8	**3452**	1113	8	**3716**	1892	8
2132	7	9	**3452**	1357	9	**3716**	1892	9
2396	8	10	**3716**	1617	10	**3716**	1892	10

*MEDIUM LOAD BEST FIT – double**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Medium Load,** a total of **20000 allocs and deallocs** were executed and for every period of 2000 allocs/deallocs the RSS and Time were recorded.
Interval = 2000
20000 / 2000 = 10 intervals
Numbers pointed by double* memory addresses range from 0 -> 20000 with 0.1, 0.3, 0.6, 0.8, 0.9 decimal values.
In use at exit = **1142208 bytes** in **36671 blocks**
Total heap usage = **36686 allocs**, **15 frees**, **1404344 bytes allocated**

RUN 1

Total time taken= **3170 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**3848**	3170	1
1948	1	2	**2396**	242	2	**3848**	3170	2
1948	2	3	**2660**	446	3	**3848**	3170	3
1948	3	4	**2660**	696	4	**3848**	3170	4
1948	4	5	**2924**	1003	5	**3848**	3170	5
1948	4	6	**2924**	1328	6	**3848**	3170	6
1948	5	7	**3188**	1667	7	**3848**	3170	7
2132	6	8	**3392**	2019	8	**3848**	3170	8
2132	7	9	**3444**	2387	9	**3848**	3170	9
2396	8	10	**3648**	2771	10	**3848**	3170	10

RUN 2

Total time taken= **3264 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**3848**	3264	1
1948	1	2	**2396**	241	2	**3848**	3264	2
1948	1	3	**2660**	445	3	**3848**	3264	3
1948	2	4	**2660**	690	4	**3848**	3264	4
1948	3	5	**2924**	1024	5	**3848**	3264	5
1948	4	6	**2924**	1380	6	**3848**	3264	6
1948	5	7	**3188**	1752	7	**3848**	3264	7
2132	6	8	**3352**	2119	8	**3848**	3264	8
2132	7	9	**3484**	2488	9	**3848**	3264	9
2396	8	10	**3668**	2868	10	**3848**	3264	10

RUN 3

Total time taken= **3192 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**3848**	3191	1
1948	1	2	**2396**	244	2	**3848**	3192	2
1948	2	3	**2660**	455	3	**3848**	3192	3
1948	3	4	**2660**	711	4	**3848**	3192	4
1948	4	5	**2924**	1026	5	**3848**	3192	5
1948	5	6	**2924**	1351	6	**3848**	3192	6
1948	6	7	**3188**	1690	7	**3848**	3192	7
2132	7	8	**3380**	2043	8	**3848**	3192	8
2132	7	9	**3452**	2410	9	**3848**	3192	9
2396	8	10	**3652**	2793	10	**3848**	3192	10

*MEDIUM LOAD WORST FIT – double**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Medium Load,** a total of **20000 allocs and deallocs** were executed and for every period of 2000 allocs/deallocs the RSS and Time were recorded.
Interval = 2000
20000 / 2000 = 10 intervals
Numbers pointed by double* memory addresses range from 0 -> 20000 with 0.1, 0.3, 0.6, 0.8, 0.9 decimal values.
In use at exit = **1222200 bytes** in **40004 blocks**
Total heap usage = **40019 allocs**, **15 frees**, **1484336 bytes allocated**

RUN 1

Total time taken= **3339 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	11	1	**3952**	3338	1
1948	1	2	**2660**	278	2	**3952**	3338	2
1948	2	3	**2924**	531	3	**3952**	3338	3
1948	3	4	**2924**	859	4	**4104**	3338	4
1948	4	5	**3188**	1213	5	**4104**	3338	5
1948	5	6	**3188**	1542	6	**4104**	3338	6
1948	7	7	**3452**	1913	7	**4104**	3338	7
2132	8	8	**3588**	2272	8	**4104**	3338	8
2132	9	9	**3768**	2615	9	**4104**	3338	9
2396	10	10	**3952**	2969	10	**4104**	3339	10

RUN 2

Total time taken= **3273 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**3952**	3272	1
1948	1	2	**2660**	276	2	**3952**	3272	2
1948	2	3	**2924**	522	3	**3952**	3272	3
1948	3	4	**2924**	844	4	**4104**	3272	4
1948	4	5	**3188**	1191	5	**4104**	3273	5
1948	5	6	**3188**	1511	6	**4104**	3273	6
1948	6	7	**3452**	1875	7	**4104**	3273	7
2132	6	8	**3604**	2227	8	**4104**	3273	8
2132	7	9	**3772**	2562	9	**4104**	3273	9
2396	8	10	**3952**	2910	10	**4104**	3273	10

RUN 3

Total time taken= **3276 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2396**	9	1	**3948**	3275	1
1948	1	2	**2660**	263	2	**3948**	3275	2
1948	2	3	**2924**	530	3	**3948**	3275	3
1948	3	4	**2924**	871	4	**4104**	3275	4
1948	3	5	**3188**	1225	5	**4104**	3275	5
1948	4	6	**3188**	1550	6	**4104**	3276	6
1948	5	7	**3452**	1913	7	**4104**	3276	7
2132	6	8	**3596**	2257	8	**4104**	3276	8
2132	7	9	**3760**	2582	9	**4104**	3276	9
2396	8	10	**3948**	2922	10	**4104**	3276	10

*MEDIUM LOAD FIRST FIT – char***

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Medium Load,** a total of **20000 allocs and deallocs** were executed and for every period of 2000 allocs/deallocs the RSS and Time were recorded.
Interval = 2000
20000 / 2000 = 10 intervals
char* strings sourced from *Collins Scrabble Words (2015).txt* input file
In use at exit = **1142208 bytes** in **36671 blocks**
Total heap usage= **56710 allocs**, **20039 frees**, **2115845 bytes allocated**

RUN 1

Total time taken= **1856 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2400**	10	1	**3724**	1856	1
1948	1	2	**2664**	92	2	**3724**	1856	2
1948	2	3	**2664**	199	3	**3724**	1856	3
1948	3	4	**2928**	330	4	**3724**	1856	4
1948	3	5	**2928**	487	5	**3724**	1856	5
1948	4	6	**3192**	670	6	**3724**	1856	6
1948	5	7	**3192**	876	7	**3724**	1856	7
2136	6	8	**3456**	1101	8	**3724**	1856	8
2136	7	9	**3456**	1339	9	**3724**	1856	9
2400	8	10	**3724**	1591	10	**3724**	1856	10

RUN 2

Total time taken= **1945 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2400**	10	1	**3724**	1945	1
1948	1	2	**2664**	93	2	**3724**	1945	2
1948	2	3	**2664**	202	3	**3724**	1945	3
1948	3	4	**2928**	339	4	**3724**	1945	4
1948	4	5	**2928**	505	5	**3724**	1945	5
1948	5	6	**3192**	698	6	**3724**	1945	6
1948	6	7	**3192**	917	7	**3724**	1945	7
2136	7	8	**3456**	1153	8	**3724**	1945	8
2136	8	9	**3456**	1404	9	**3724**	1945	9
2400	8	10	**3724**	1669	10	**3724**	1945	10

RUN 3

Total time taken= **1940 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2400**	11	1	**3724**	1939	1
1948	1	2	**2664**	94	2	**3724**	1939	2
1948	2	3	**2664**	204	3	**3724**	1939	3
1948	3	4	**2928**	342	4	**3724**	1939	4
1948	4	5	**2928**	508	5	**3724**	1939	5
1948	5	6	**3192**	703	6	**3724**	1939	6
1948	6	7	**3192**	920	7	**3724**	1939	7
2136	7	8	**3456**	1155	8	**3724**	1939	8
2136	8	9	**3456**	1407	9	**3724**	1939	9
2400	9	10	**3724**	1670	10	**3724**	1940	10

*MEDIUM LOAD BEST FIT – char***

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Medium Load,** a total of **20000 allocs and deallocs** were executed and for every period of 2000 allocs/deallocs the RSS and Time were recorded.
Interval = 2000
20000 / 2000 = 10 intervals
char* strings sourced from *Collins Scrabble Words (2015).txt* input file
In use at exit = **1142208 bytes** in **36671 blocks**
Total heap usage= **56710 allocs**, **20039 frees**, **2115845 bytes allocated**

RUN 1

Total time taken= **3378 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2400**	12	1	**3912**	3378	1
1948	1	2	**2664**	280	2	**3912**	3378	2
1948	2	3	**2664**	515	3	**3912**	3378	3
1948	3	4	**2664**	780	4	**3912**	3378	4
1948	4	5	**2928**	1101	5	**3912**	3378	5
1948	5	6	**2928**	1440	6	**3912**	3378	6
1948	7	7	**3192**	1795	7	**3912**	3378	7
2136	8	8	**3400**	2166	8	**3912**	3378	8
2136	9	9	**3492**	2553	9	**3912**	3378	9
2400	10	10	**3704**	2962	10	**3912**	3378	10

RUN 2

Total time taken= **3208 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2400**	9	1	**3852**	3208	1
1948	1	2	**2664**	244	2	**3852**	3208	2
1948	1	3	**2664**	448	3	**3852**	3208	3
1948	2	4	**2664**	694	4	**3852**	3208	4
1948	3	5	**2928**	1002	5	**3852**	3208	5
1948	4	6	**2928**	1332	6	**3852**	3208	6
1948	5	7	**3192**	1685	7	**3852**	3208	7
2136	6	8	**3456**	2050	8	**3852**	3208	8
2136	7	9	**3456**	2422	9	**3852**	3208	9
2400	8	10	**3720**	2806	10	**3852**	3208	10

RUN 3

Total time taken= **3413 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2400**	11	1	**3912**	3413	1
1948	1	2	**2664**	289	2	**3912**	3413	2
1948	2	3	**2664**	504	3	**3912**	3413	3
1948	2	4	**2664**	762	4	**3912**	3413	4
1948	3	5	**2928**	1085	5	**3912**	3413	5
1948	4	6	**2928**	1431	6	**3912**	3413	6
1948	5	7	**3192**	1805	7	**3912**	3413	7
2136	6	8	**3392**	2191	8	**3912**	3413	8
2136	7	9	**3500**	2587	9	**3912**	3413	9
2400	8	10	**3708**	2991	10	**3912**	3413	10

*MEDIUM LOAD WORST FIT – char***

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Medium Load,** a total of **20000 allocs and deallocs** were executed and for every period of 2000 allocs/deallocs the RSS and Time were recorded.
Interval = 2000
20000 / 2000 = 10 intervals
char* strings sourced from *Collins Scrabble Words (2015).txt* input file
In use at exit = **1222200 bytes** in **40004 blocks**
Total heap usage= **60043 allocs**, **20039 frees**, **2195837 bytes allocated**

RUN 1

Total time taken= **3383 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2400**	11	1	**3976**	3383	1
1948	1	2	**2664**	279	2	**3976**	3383	2
1948	2	3	**2928**	532	3	**3976**	3383	3
1948	3	4	**2928**	860	4	**4172**	3383	4
1948	4	5	**3192**	1211	5	**4172**	3383	5
1948	5	6	**3456**	1539	6	**4172**	3383	6
1948	6	7	**3456**	1925	7	**4172**	3383	7
2136	7	8	**3764**	2304	8	**4172**	3383	8
2136	8	9	**3764**	2653	9	**4172**	3383	9
2400	9	10	**3976**	3011	10	**4172**	3383	10

RUN 2

Total time taken= **3268 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2400**	11	1	**3976**	3267	1
1948	1	2	**2664**	281	2	**3976**	3267	2
1948	2	3	**2928**	535	3	**3976**	3267	3
1948	3	4	**2928**	867	4	**4172**	3267	4
1948	4	5	**3192**	1224	5	**4172**	3267	5
1948	5	6	**3456**	1536	6	**4172**	3267	6
1948	6	7	**3456**	1886	7	**4172**	3267	7
2136	7	8	**3764**	2227	8	**4172**	3267	8
2136	8	9	**3764**	2555	9	**4172**	3268	9
2400	9	10	**3976**	2901	10	**4172**	3268	10

RUN 3

Total time taken= **3351 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**2400**	10	1	**3976**	3351	1
1948	1	2	**2664**	281	2	**3976**	3351	2
1948	2	3	**2928**	536	3	**3976**	3351	3
1948	3	4	**2928**	870	4	**4172**	3351	4
1948	4	5	**3192**	1230	5	**4172**	3351	5
1948	5	6	**3456**	1560	6	**4172**	3351	6
1948	6	7	**3456**	1930	7	**4172**	3351	7
2136	6	8	**3764**	2289	8	**4172**	3351	8
2136	7	9	**3764**	2631	9	**4172**	3351	9
2400	8	10	**3976**	2983	10	**4172**	3351	10

*LOW LOAD FIRST FIT – int**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Low Load,** a total of **7000 allocs and deallocs** were executed and for every period of 700 allocs/deallocs the RSS and Time were recorded.
Interval = 700
7000 / 700 = 10 intervals
Numbers pointed by int* memory addresses range from 0 -> 7000
In use at exit = **401592 bytes** in **14004 blocks**
Total heap usage = **14017 allocs**, **13 frees**, **467120 bytes allocated**

RUN 1

Total time taken= **85 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	3	1	**2128**	85	1
1948	0	2	**1948**	11	2	**2128**	85	2
1948	0	3	**1948**	19	3	**2128**	85	3
1948	1	4	**1948**	27	4	**2128**	85	4
1948	1	5	**1948**	36	5	**2128**	85	5
1948	1	6	**1948**	44	6	**2128**	85	6
1948	2	7	**1948**	52	7	**2128**	85	7
1948	2	8	**1948**	60	8	**2128**	85	8
1948	2	9	**1948**	68	9	**2128**	85	9
1948	3	10	**2128**	77	10	**2128**	85	10

RUN 2

Total time taken= **90 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	3	1	**2132**	90	1
1948	0	2	**1948**	12	2	**2132**	90	2
1948	0	3	**1948**	20	3	**2132**	90	3
1948	1	4	**1948**	29	4	**2132**	90	4
1948	1	5	**1948**	37	5	**2132**	90	5
1948	1	6	**1948**	46	6	**2132**	90	6
1948	2	7	**1948**	55	7	**2132**	90	7
1948	2	8	**1948**	63	8	**2132**	90	8
1948	2	9	**1948**	72	9	**2132**	90	9
1948	3	10	**2132**	81	10	**2132**	90	10

RUN 3

Total time taken= **88 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	4	1	**2132**	87	1
1948	1	2	**1948**	12	2	**2132**	87	2
1948	1	3	**1948**	21	3	**2132**	88	3
1948	1	4	**1948**	29	4	**2132**	88	4
1948	2	5	**1948**	37	5	**2132**	88	5
1948	2	6	**1948**	46	6	**2132**	88	6
1948	2	7	**1948**	54	7	**2132**	88	7
1948	3	8	**1948**	63	8	**2132**	88	8
1948	3	9	**1948**	71	9	**2132**	88	9
1948	3	10	**2132**	79	10	**2132**	88	10

*LOW LOAD BEST FIT – int**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Low Load,** a total of **7000 allocs and deallocs** were executed and for every period of 700 allocs/deallocs the RSS and Time were recorded.
Interval = 700
7000 / 700 = 10 intervals
Numbers pointed by int* memory addresses range from 0 -> 7000
In use at exit = **373584 bytes** in **12837 blocks**
Total heap usage = **12850 allocs**, **13 frees**, **439112 bytes allocated**

RUN 1

Total time taken= **408 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	3	1	**1948**	408	1
1948	0	2	**1948**	45	2	**1948**	408	2
1948	1	3	**1948**	85	3	**1948**	408	3
1948	1	4	**1948**	123	4	**1948**	408	4
1948	1	5	**1948**	159	5	**1948**	408	5
1948	2	6	**1948**	193	6	**1948**	408	6
1948	2	7	**1948**	238	7	**1948**	408	7
1948	2	8	**1948**	280	8	**1948**	408	8
1948	3	9	**1948**	321	9	**1948**	408	9
1948	3	10	**1948**	364	10	**1948**	408	10

RUN 2

Total time taken= **423 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	4	1	**1948**	423	1
1948	1	2	**1948**	49	2	**1948**	423	2
1948	1	3	**1948**	91	3	**1948**	423	3
1948	2	4	**1948**	131	4	**1948**	423	4
1948	2	5	**1948**	168	5	**1948**	423	5
1948	2	6	**1948**	203	6	**1948**	423	6
1948	3	7	**1948**	249	7	**1948**	423	7
1948	3	8	**1948**	294	8	**1948**	423	8
1948	4	9	**1948**	336	9	**1948**	423	9
1948	4	10	**1948**	379	10	**1948**	423	10

RUN 3

Total time taken= **412 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	3	1	**1948**	412	1
1948	0	2	**1948**	45	2	**1948**	412	2
1948	0	3	**1948**	84	3	**1948**	412	3
1948	0	4	**1948**	122	4	**1948**	412	4
1948	1	5	**1948**	158	5	**1948**	412	5
1948	1	6	**1948**	193	6	**1948**	412	6
1948	1	7	**1948**	242	7	**1948**	412	7
1948	2	8	**1948**	287	8	**1948**	412	8
1948	2	9	**1948**	327	9	**1948**	412	9
1948	2	10	**1948**	369	10	**1948**	412	10

*LOW LOAD WORST FIT – int**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Low Load,** a total of **7000 allocs and deallocs** were executed and for every period of 700 allocs/deallocs the RSS and Time were recorded.
Interval = 700
7000 / 700 = 10 intervals
Numbers pointed by int* memory addresses range from 0 -> 7000
In use at exit = **401592 bytes** in **14004 blocks**
Total heap usage = **14017 allocs**, **13 frees**, **467120 bytes allocated**

RUN 1

Total time taken= **458 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	3	1	**2132**	458	1
1948	0	2	**1948**	42	2	**2132**	458	2
1948	0	3	**1948**	78	3	**2132**	458	3
1948	1	4	**1948**	121	4	**2132**	458	4
1948	1	5	**1948**	171	5	**2132**	458	5
1948	1	6	**1948**	222	6	**2132**	458	6
1948	1	7	**1948**	274	7	**2132**	458	7
1948	2	8	**2132**	322	8	**2132**	458	8
1948	2	9	**2132**	369	9	**2132**	458	9
1948	2	10	**2132**	414	10	**2132**	458	10

RUN 2

Total time taken= **448 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	4	1	**2128**	448	1
1948	1	2	**1948**	43	2	**2128**	448	2
1948	1	3	**1948**	79	3	**2128**	448	3
1948	1	4	**1948**	122	4	**2128**	448	4
1948	2	5	**1948**	168	5	**2128**	448	5
1948	2	6	**1948**	215	6	**2128**	448	6
1948	2	7	**1948**	262	7	**2128**	448	7
1948	3	8	**2128**	309	8	**2128**	448	8
1948	3	9	**2128**	357	9	**2128**	448	9
1948	3	10	**2128**	403	10	**2128**	448	10

RUN 3

Total time taken= **447 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	4	1	**2132**	447	1
1948	1	2	**1948**	44	2	**2132**	447	2
1948	1	3	**1948**	80	3	**2132**	447	3
1948	1	4	**1948**	123	4	**2132**	447	4
1948	2	5	**1948**	169	5	**2132**	447	5
1948	2	6	**1948**	216	6	**2132**	447	6
1948	2	7	**1948**	264	7	**2132**	447	7
1948	3	8	**2132**	310	8	**2132**	447	8
1948	3	9	**2132**	358	9	**2132**	447	9
1948	3	10	**2132**	403	10	**2132**	447	10

*LOW LOAD FIRST FIT – double**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Low Load,** a total of **7000 allocs and deallocs** were executed and for every period of 700 allocs/deallocs the RSS and Time were recorded.
Interval = 7000
7000 / 700 = 10 intervals
Numbers pointed by double* memory addresses range from 0 -> 7000 with 0.1, 0.3, 0.6, 0.8, 0.9 decimal values.
In use at exit = **373584 bytes** in **12837 blocks**
Total heap usage = **12850 allocs**, **13 frees**, **439112 bytes allocated**

RUN 1

Total time taken= **229 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	3	1	**2132**	229	1
1948	0	2	**1948**	12	2	**2132**	229	2
1948	1	3	**1948**	25	3	**2132**	229	3
1948	1	4	**1948**	40	4	**2132**	229	4
1948	1	5	**1948**	59	5	**2132**	229	5
1948	2	6	**1948**	81	6	**2132**	229	6
1948	2	7	**1948**	107	7	**2132**	229	7
1948	2	8	**1948**	134	8	**2132**	229	8
1948	3	9	**1948**	164	9	**2132**	229	9
1948	3	10	**1948**	195	10	**2132**	229	10

RUN 2

Total time taken= **233 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	4	1	**2132**	233	1
1948	1	2	**1948**	13	2	**2132**	233	2
1948	1	3	**1948**	26	3	**2132**	233	3
1948	1	4	**1948**	42	4	**2132**	233	4
1948	2	5	**1948**	61	5	**2132**	233	5
1948	2	6	**1948**	84	6	**2132**	233	6
1948	2	7	**1948**	110	7	**2132**	233	7
1948	3	8	**1948**	137	8	**2132**	233	8
1948	3	9	**1948**	168	9	**2132**	233	9
1948	3	10	**1948**	199	10	**2132**	233	10

RUN 3

Total time taken= **230 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1948	0	1	**1948**	3	1	**2132**	230	1
1948	0	2	**1948**	12	2	**2132**	230	2
1948	0	3	**1948**	25	3	**2132**	230	3
1948	1	4	**1948**	41	4	**2132**	230	4
1948	1	5	**1948**	59	5	**2132**	230	5
1948	1	6	**1948**	82	6	**2132**	230	6
1948	2	7	**1948**	107	7	**2132**	230	7
1948	2	8	**1948**	135	8	**2132**	230	8
1948	2	9	**1948**	165	9	**2132**	230	9
1948	3	10	**1948**	197	10	**2132**	230	10

*LOW LOAD BEST FIT – double**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Low Load,** a total of **7000 allocs and deallocs** were executed and for every period of 700 allocs/deallocs the RSS and Time were recorded.
Interval = 7000
7000 / 700 = 10 intervals
Numbers pointed by double* memory addresses range from 0 -> 7000 with 0.1, 0.3, 0.6, 0.8, 0.9 decimal values.
In use at exit = **373584 bytes** in **12837 blocks**
Total heap usage = **12850 allocs**, **13 frees**, **439112 bytes allocated**

RUN 1

Total time taken= **403 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	4	1	**2132**	403	1
1952	0	2	**1952**	34	2	**2132**	403	2
1952	1	3	**1952**	59	3	**2132**	403	3
1952	1	4	**1952**	91	4	**2132**	403	4
1952	1	5	**1952**	130	5	**2132**	403	5
1952	2	6	**1952**	171	6	**2132**	403	6
1952	2	7	**1952**	214	7	**2132**	403	7
1952	2	8	**1952**	258	8	**2132**	403	8
1952	3	9	**1952**	305	9	**2132**	403	9
1952	3	10	**1952**	352	10	**2132**	403	10

RUN 2

Total time taken= **388 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	4	1	**2128**	388	1
1952	1	2	**1952**	32	2	**2128**	388	2
1952	1	3	**1952**	56	3	**2128**	388	3
1952	1	4	**1952**	86	4	**2128**	388	4
1952	2	5	**1952**	124	5	**2128**	388	5
1952	2	6	**1952**	163	6	**2128**	388	6
1952	2	7	**1952**	205	7	**2128**	388	7
1952	3	8	**1952**	248	8	**2128**	388	8
1952	3	9	**1952**	293	9	**2128**	388	9
1952	3	10	**1952**	339	10	**2128**	388	10

RUN 3

Total time taken= **400 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	4	1	**2132**	400	1
1952	1	2	**1952**	32	2	**2132**	400	2
1952	1	3	**1952**	56	3	**2132**	400	3
1952	1	4	**1952**	86	4	**2132**	400	4
1952	2	5	**1952**	123	5	**2132**	400	5
1952	2	6	**1952**	163	6	**2132**	400	6
1952	2	7	**1952**	205	7	**2132**	400	7
1952	3	8	**1952**	252	8	**2132**	400	8
1952	3	9	**1952**	300	9	**2132**	400	9
1952	3	10	**1952**	349	10	**2132**	400	10

*LOW LOAD WORST FIT – double**

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Low Load,** a total of **7000 allocs and deallocs** were executed and for every period of 700 allocs/deallocs the RSS and Time were recorded.
Interval = 7000
7000 / 700 = 10 intervals
Numbers pointed by double* memory addresses range from 0 -> 7000 with 0.1, 0.3, 0.6, 0.8, 0.9 decimal values.
In use at exit = **401592 bytes** in **14004 blocks**
Total heap usage = **14017 allocs**, **13 frees**, **467120 bytes allocated**

RUN 1

Total time taken= **387 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	3	1	**2132**	387	1
1952	0	2	**1952**	34	2	**2132**	387	2
1952	0	3	**1952**	63	3	**2132**	387	3
1952	1	4	**1952**	101	4	**2132**	387	4
1952	1	5	**1952**	142	5	**2132**	387	5
1952	1	6	**1952**	180	6	**2132**	387	6
1952	1	7	**1952**	223	7	**2132**	387	7
1952	2	8	**1952**	264	8	**2132**	387	8
1952	2	9	**2132**	304	9	**2132**	387	9
1952	2	10	**2132**	345	10	**2132**	387	10

RUN 2

Total time taken= **390 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	3	1	**2132**	390	1
1952	0	2	**1952**	35	2	**2132**	390	2
1952	1	3	**1952**	64	3	**2132**	390	3
1952	1	4	**1952**	102	4	**2132**	390	4
1952	1	5	**1952**	143	5	**2132**	390	5
1952	2	6	**1952**	181	6	**2132**	390	6
1952	2	7	**1952**	225	7	**2132**	390	7
1952	2	8	**1952**	266	8	**2132**	390	8
1952	3	9	**2132**	306	9	**2132**	390	9
1952	3	10	**2132**	347	10	**2132**	390	10

RUN 3

Total time taken= **386 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	3	1	**2132**	386	1
1952	1	2	**1952**	35	2	**2132**	386	2
1952	1	3	**1952**	64	3	**2132**	386	3
1952	1	4	**1952**	102	4	**2132**	386	4
1952	2	5	**1952**	143	5	**2132**	386	5
1952	2	6	**1952**	181	6	**2132**	386	6
1952	2	7	**1952**	224	7	**2132**	386	7
1952	2	8	**1952**	265	8	**2132**	386	8
1952	3	9	**2132**	304	9	**2132**	386	9
1952	3	10	**2132**	345	10	**2132**	386	10

*LOW LOAD FIRST FIT – char***

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Low Load,** a total of **7000 allocs and deallocs** were executed and for every period of 700 allocs/deallocs the RSS and Time were recorded.
Interval = 7000
7000 / 700 = 10 intervals
char* strings sourced from *Collins Scrabble Words (2015).txt* input file
In use at exit = **373584 bytes** in **12837 blocks**
Total heap usage= **19861 allocs**, **7024 frees**, **693077 bytes allocated**

RUN 1

Total time taken= **239 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	4	1	**2136**	239	1
1952	1	2	**1952**	14	2	**2136**	239	2
1952	1	3	**1952**	27	3	**2136**	239	3
1952	1	4	**1952**	44	4	**2136**	239	4
1952	2	5	**1952**	64	5	**2136**	239	5
1952	2	6	**1952**	87	6	**2136**	239	6
1952	2	7	**1952**	113	7	**2136**	239	7
1952	3	8	**1952**	142	8	**2136**	239	8
1952	3	9	**2136**	172	9	**2136**	239	9
1952	3	10	**2136**	205	10	**2136**	239	10

RUN 2

Total time taken= **231 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	4	1	**2136**	231	1
1952	0	2	**1952**	14	2	**2136**	231	2
1952	1	3	**1952**	26	3	**2136**	231	3
1952	1	4	**1952**	42	4	**2136**	231	4
1952	1	5	**1952**	61	5	**2136**	231	5
1952	2	6	**1952**	84	6	**2136**	231	6
1952	2	7	**1952**	109	7	**2136**	231	7
1952	2	8	**1952**	137	8	**2136**	231	8
1952	3	9	**2136**	167	9	**2136**	231	9
1952	3	10	**2136**	198	10	**2136**	231	10

RUN 3

Total time taken= **236 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	4	1	**2136**	236	1
1952	0	2	**1952**	14	2	**2136**	236	2
1952	0	3	**1952**	27	3	**2136**	236	3
1952	1	4	**1952**	43	4	**2136**	236	4
1952	1	5	**1952**	63	5	**2136**	236	5
1952	1	6	**1952**	86	6	**2136**	236	6
1952	2	7	**1952**	113	7	**2136**	236	7
1952	2	8	**1952**	141	8	**2136**	236	8
1952	2	9	**2136**	171	9	**2136**	236	9
1952	3	10	**2136**	203	10	**2136**	236	10

*LOW LOAD BEST FIT – char***

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Low Load,** a total of **7000 allocs and deallocs** were executed and for every period of 700 allocs/deallocs the RSS and Time were recorded.
Interval = 7000
7000 / 700 = 10 intervals
char* strings sourced from *Collins Scrabble Words (2015).txt* input file
In use at exit = **373584 bytes** in **12837 blocks**
Total heap usage= **19861 allocs**, **7024 frees**, **693077 bytes allocated**

RUN 1

Total time taken= **402 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	4	1	**2136**	402	1
1952	0	2	**1952**	33	2	**2136**	402	2
1952	1	3	**1952**	59	3	**2136**	402	3
1952	1	4	**1952**	89	4	**2136**	402	4
1952	1	5	**1952**	127	5	**2136**	402	5
1952	2	6	**1952**	168	6	**2136**	402	6
1952	2	7	**1952**	211	7	**2136**	402	7
1952	2	8	**1952**	256	8	**2136**	402	8
1952	3	9	**1952**	303	9	**2136**	402	9
1952	3	10	**2136**	351	10	**2136**	402	10

RUN 2

Total time taken= **405 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	4	1	**2136**	405	1
1952	0	2	**1952**	34	2	**2136**	405	2
1952	0	3	**1952**	60	3	**2136**	405	3
1952	1	4	**1952**	91	4	**2136**	405	4
1952	1	5	**1952**	129	5	**2136**	405	5
1952	1	6	**1952**	170	6	**2136**	405	6
1952	2	7	**1952**	215	7	**2136**	405	7
1952	2	8	**1952**	261	8	**2136**	405	8
1952	2	9	**1952**	307	9	**2136**	405	9
1952	3	10	**2136**	354	10	**2136**	405	10

RUN 3

Total time taken= **446 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	13	1	**2136**	446	1
1952	0	2	**1952**	47	2	**2136**	446	2
1952	0	3	**1952**	76	3	**2136**	446	3
1952	1	4	**1952**	113	4	**2136**	446	4
1952	1	5	**1952**	157	5	**2136**	446	5
1952	1	6	**1952**	204	6	**2136**	446	6
1952	2	7	**1952**	250	7	**2136**	446	7
1952	2	8	**1952**	298	8	**2136**	446	8
1952	2	9	**1952**	246	9	**2136**	446	9
1952	3	10	**2136**	394	10	**2136**	446	10

*LOW LOAD WORST FIT – char***

Sizes of free blocks varied from 5, 8, 13, 21, 34 bytes
RSS and Time collected across 10 intervals each during initial free block generation, allocation and deallocation respectively.
For **Low Load,** a total of **7000 allocs and deallocs** were executed and for every period of 700 allocs/deallocs the RSS and Time were recorded.
Interval = 7000
7000 / 700 = 10 intervals
char* strings sourced from *Collins Scrabble Words (2015).txt* input file
In use at exit = **401592 bytes** in **14004 blocks**
Total heap usage= **21028 allocs**, **7024 frees**, **721085 bytes allocated**

RUN 1

Total time taken= **415 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	4	1	**2136**	415	1
1952	0	2	**1952**	37	2	**2136**	415	2
1952	1	3	**1952**	68	3	**2136**	415	3
1952	1	4	**1952**	109	4	**2136**	415	4
1952	1	5	**1952**	153	5	**2136**	415	5
1952	1	6	**1952**	193	6	**2136**	415	6
1952	2	7	**2136**	239	7	**2136**	415	7
1952	2	8	**2136**	283	8	**2136**	415	8
1952	2	9	**2136**	325	9	**2136**	415	9
1952	3	10	**2136**	369	10	**2136**	415	10

RUN 2

Total time taken= **411 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	4	1	**2136**	411	1
1952	1	2	**1952**	37	2	**2136**	411	2
1952	1	3	**1952**	68	3	**2136**	411	3
1952	1	4	**1952**	109	4	**2136**	411	4
1952	2	5	**1952**	152	5	**2136**	411	5
1952	2	6	**1952**	192	6	**2136**	411	6
1952	2	7	**2136**	238	7	**2136**	411	7
1952	3	8	**2136**	281	8	**2136**	411	8
1952	3	9	**2136**	322	9	**2136**	411	9
1952	3	10	**2136**	366	10	**2136**	411	10

RUN 3

Total time taken= **406 ms**

Free Block Generation RSS	Time (ms)	Interval	Allocation RSS	Time (ms)	Interval	Deallocation RSS	Time (ms)	Interval
1952	0	1	**1952**	4	1	**2136**	406	1
1952	0	2	**1952**	36	2	**2136**	406	2
1952	0	3	**1952**	66	3	**2136**	406	3
1952	1	4	**1952**	106	4	**2136**	406	4
1952	1	5	**1952**	149	5	**2136**	406	5
1952	1	6	**1952**	189	6	**2136**	406	6
1952	2	7	**2136**	233	7	**2136**	406	7
1952	2	8	**2136**	277	8	**2136**	406	8
1952	2	9	**2136**	318	9	**2136**	406	9
1952	3	10	**2136**	361	10	**2136**	406	10