

StringStrand

dna length = 4,639,221

cutting at enzyme gaattc

Class	splicee	recomb	time	appends
StringStrand:	256	4,800,471	4.465	1290
StringStrand:	512	4,965,591	4.641	1290
StringStrand:	1,024	5,295,831	4.957	1290
StringStrand:	2,048	5,956,311	6.429	1290
StringStrand:	4,096	7,277,271	7.719	1290
StringStrand:	8,192	9,919,191	9.725	1290
StringStrand:	16,384	15,203,031	14.690	1290
StringStrand:	32,768	25,770,711	27.208	1290
StringStrand:	65,536	46,906,071	63.388	1290
StringStrand:	131,072	89,176,791	147.382	1290
StringStrand:	262,144	173,718,231	321.301	1290

Exception in thread "main" java.lang.OutOfMemoryError: Java heap space
at java.util.Arrays.copyOf([Arrays.java:3332](#))
at java.lang.AbstractStringBuilder.ensureCapacityInternal([AbstractStringBuilder.java:124](#))
at java.lang.AbstractStringBuilder.append([AbstractStringBuilder.java:448](#))
at java.lang.StringBuilder.append([StringBuilder.java:136](#))
at StringStrand.append([StringStrand.java:70](#))
at IDnaStrand.cutAndSplice([IDnaStrand.java:40](#))
at DNABenchmark.strandSpliceBenchmark([DNABenchmark.java:67](#))
at DNABenchmark.main([DNABenchmark.java:110](#))

StringBuilderStrand

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Class	splicee	recomb	time	appends
StringBuilderStrand:	256	4,800,471	0.081	1290
StringBuilderStrand:	512	4,965,591	0.069	1290
StringBuilderStrand:	1,024	5,295,831	0.071	1290
StringBuilderStrand:	2,048	5,956,311	0.030	1290
StringBuilderStrand:	4,096	7,277,271	0.053	1290
StringBuilderStrand:	8,192	9,919,191	0.041	1290
StringBuilderStrand:	16,384	15,203,031	0.083	1290
StringBuilderStrand:	32,768	25,770,711	0.138	1290
StringBuilderStrand:	65,536	46,906,071	0.274	1290
StringBuilderStrand:	131,072	89,176,791	0.417	1290
StringBuilderStrand:	262,144	173,718,231	0.588	1290

Exception in thread "main" java.lang.OutOfMemoryError: Java heap space
at java.util.Arrays.copyOf([Arrays.java:3332](#))
at
java.lang.AbstractStringBuilder.ensureCapacityInternal([AbstractStringBuilder.java:124](#))
at java.lang.AbstractStringBuilder.append([AbstractStringBuilder.java:448](#))
at java.lang.StringBuilder.append([StringBuilder.java:136](#))
at StringBuilderStrand.append([StringBuilderStrand.java:70](#))
at IDnaStrand.cutAndSplice([IDnaStrand.java:40](#))
at DNABenchmark.strandSpliceBenchmark([DNABenchmark.java:67](#))
at DNABenchmark.main([DNABenchmark.java:110](#))

LinkStrand

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Class	splicee	recomb	time	appends

LinkStrand:	256	4,800,471	0.039	1290
LinkStrand:	512	4,965,591	0.036	1290
LinkStrand:	1,024	5,295,831	0.036	1290
LinkStrand:	2,048	5,956,311	0.027	1290
LinkStrand:	4,096	7,277,271	0.033	1290
LinkStrand:	8,192	9,919,191	0.037	1290
LinkStrand:	16,384	15,203,031	0.029	1290
LinkStrand:	32,768	25,770,711	0.027	1290
LinkStrand:	65,536	46,906,071	0.029	1290
LinkStrand:	131,072	89,176,791	0.031	1290
LinkStrand:	262,144	173,718,231	0.028	1290
LinkStrand:	524,288	342,801,111	0.028	1290
LinkStrand:	1,048,576	680,966,871	0.034	1290
LinkStrand:	2,097,152	1,357,298,391	0.036	1290
LinkStrand:	4,194,304	2,709,961,431	0.028	1290
LinkStrand:	8,388,608	5,415,287,511	0.028	1290
LinkStrand:	16,777,216	10,825,939,671	0.027	1290
LinkStrand:	33,554,432	21,647,243,991	0.025	1290
LinkStrand:	67,108,864	43,289,852,631	0.027	1290
LinkStrand:	134,217,728	86,575,069,911	0.027	1290
LinkStrand:	268,435,456	173,145,504,471	0.027	1290

Exception in thread "main" java.lang.OutOfMemoryError: Java heap space

at java.util.Arrays.copyOf([Arrays.java:3332](#))

at java.lang.AbstractStringBuilder.ensureCapacityInternal([AbstractStringBuilder.java:124](#))

at java.lang.AbstractStringBuilder.append([AbstractStringBuilder.java:448](#))

at java.lang.StringBuilder.append([StringBuilder.java:136](#))

at DNABenchmark.main([DNABenchmark.java:107](#))