./build/main

Algorithm: Bubble Sort

Array size: 10

Array size: 100

Array size: 1000

Array size: 10000

Random: 429ms, 458ms, 485ms, 466ms, 444ms, 457ms, 436ms, 417ms, 441ms, 431ms Ordered: 150ms, 151ms, 159ms, 155ms, 154ms, 155ms, 175ms, 170ms, 164ms, 157ms Reverse: 493ms, 503ms, 497ms, 486ms, 481ms, 464ms, 469ms, 456ms, 458ms, 462ms

Array size: 100000

Random: 43285ms, 43143ms, 42939ms, 42931ms, 42969ms, 42997ms, 43095ms, 43151ms,

43046ms, 43085ms

Ordered: 14816ms, 14832ms, 14796ms, 14896ms, 14821ms, 14807ms, 14804ms, 14794ms,

14890ms, 14768ms

Reverse: 46340ms, 46263ms, 46294ms, 46124ms, 46209ms, 46300ms, 46120ms, 46310ms,

46114ms, 46047ms

Array size: 1000000

Array size: 10000000

Algorithm: Insertion Sort

Array size: 10

Array size: 100

Array size: 1000

Array size: 10000

Random: 117ms, 135ms, 130ms, 125ms, 126ms, 124ms, 121ms, 118ms, 134ms, 119ms

Reverse: 269ms, 265ms, 261ms, 252ms, 241ms, 242ms, 248ms, 240ms, 242ms, 243ms

Array size: 100000

Random: 12156ms, 12143ms, 12096ms, 12118ms, 12104ms, 12132ms, 12110ms, 12116ms,

12184ms, 12120ms

Reverse: 24282ms, 24243ms, 24237ms, 24394ms, 24293ms, 24236ms, 24111ms, 24119ms,

24116ms, 24138ms

Array size: 1000000

Array size: 10000000

Algorithm: Selection Sort

Array size: 10

Array size: 100

Array size: 1000

Array size: 10000

Random: 167ms, 211ms, 193ms, 176ms, 184ms, 177ms, 171ms, 172ms, 174ms, 178ms Ordered: 178ms, 183ms, 187ms, 183ms, 185ms, 186ms, 183ms, 200ms, 188ms, 186ms Reverse: 187ms, 178ms, 178ms, 174ms, 166ms, 169ms, 169ms, 166ms, 170ms, 164ms

Array size: 100000

Random: 17053ms, 17035ms, 17015ms, 17028ms, 17037ms, 17167ms, 16993ms, 17109ms,

17083ms, 17084ms

Ordered: 17316ms, 17262ms, 17270ms, 17344ms, 17273ms, 17223ms, 17243ms, 17178ms,

17242ms, 17208ms

Reverse: 16615ms, 16621ms, 16574ms, 16572ms, 16647ms, 16630ms, 16530ms, 16536ms,

16500ms, 16571ms

Array size: 1000000

Array size: 10000000

Algorithm: Merge Sort

Array size: 10

Array size: 100

Array size: 1000

Array size: 10000

Array size: 100000

Random: 55ms, 54ms, 57ms, 55ms, 54ms, 57ms, 56ms, 55ms, 61ms, 56ms Ordered: 46ms, 47ms, 47ms, 46ms, 46ms, 46ms, 46ms, 47ms, 47ms Reverse: 46ms, 47ms, 46ms, 45ms, 48ms, 46ms, 47ms, 47ms, 46ms, 46ms

Array size: 1000000

Random: 597ms, 584ms, 583ms, 590ms, 588ms, 593ms, 598ms, 594ms, 593ms, 590ms Ordered: 483ms, 489ms, 484ms, 480ms, 487ms, 496ms, 485ms, 483ms, 485ms, 482ms Reverse: 490ms, 491ms, 486ms, 486ms, 482ms, 488ms, 484ms, 487ms, 488ms, 492ms

Array size: 10000000

Random: 6793ms, 6833ms, 6873ms, 6827ms, 6895ms, 6840ms, 6798ms, 6839ms, 6814ms,

6804ms

Ordered: 5677ms, 5622ms, 5662ms, 5599ms, 5608ms, 5700ms, 5634ms, 5719ms, 5622ms,

5619ms

Reverse: 5679ms, 5582ms, 5669ms, 5595ms, 5645ms, 5606ms, 5662ms, 5628ms, 5639ms,

5590ms

Algorithm: Quick Sort

Array size: 10

Array size: 100

Array size: 1000

Array size: 10000

Array size: 100000

Random: 14ms, 15ms, 15ms, 15ms, 15ms, 15ms, 15ms, 15ms, 15ms, 15ms

Array size: 1000000

Random: 175ms, 176ms, 176ms, 174ms, 173ms, 176ms, 173ms, 173ms, 173ms, 173ms

Ordered: 53ms, 54ms, 52ms, 54ms, 53ms, 52ms, 53ms, 52ms, 53ms, 54ms Reverse: 55ms, 56ms, 55ms, 56ms, 56ms, 56ms, 55ms, 57ms, 56ms, 56ms

Array size: 10000000

Random: 2012ms, 1997ms, 2010ms, 2034ms, 2063ms, 1991ms, 2019ms, 2032ms, 1995ms,

2016ms

Ordered: 608ms, 621ms, 607ms, 619ms, 610ms, 633ms, 610ms, 618ms, 604ms, 639ms Reverse: 631ms, 665ms, 640ms, 661ms, 644ms, 656ms, 648ms, 647ms, 634ms, 636ms

```
Algorithm: Bubble Sort
Array size: 10
Array size: 100
Array size: 1000
Array size: 10000
Randóm: 429ms, 458ms, 485ms, 466ms, 444ms, 457ms, 436ms, 417ms, 441ms, 431ms
Ordered: 150ms, 151ms, 159ms, 155ms, 154ms, 155ms, 175ms, 170ms, 164ms, 157ms
Reverse: 493ms, 503ms, 497ms, 486ms, 481ms, 464ms, 469ms, 456ms, 458ms, 462ms
Array size: 100000
Random: 43285ms, 43143ms, 42939ms, 42931ms, 42969ms, 42997ms, 43095ms, 43151ms, 43046ms, 43085ms
Ordered: 14816ms, 14832ms, 14796ms, 14896ms, 14821ms, 14807ms, 14804ms, 14794ms, 14890ms, 14768ms
Reverse: 46340ms, 46263ms, 46294ms, 46124ms, 46209ms, 46300ms, 46120ms, 46310ms, 46114ms, 46047ms
Arrav size: 1000000
Arrav size: 10000000
Algorithm: Insertion Sort
Array size: 10
Array size: 100
Array size: 1000
Array size: 10000
Array size: 100000
```

Array size: 1000000

Array size: 10000000

```
Algorithm: Merge Sort
Array size: 10
Array size: 100
Array size: 1000
Array size: 10000
Array size: 100000
Random: 55ms, 54ms, 57ms, 55ms, 54ms, 57ms, 56ms, 55ms, 61ms, 56ms
Ordered: 46ms, 47ms, 47ms, 47ms, 46ms, 46ms, 48ms, 46ms, 47ms, 47ms
Reverse: 46ms, 47ms, 46ms, 45ms, 48ms, 46ms, 47ms, 47ms, 46ms, 46ms
Randóm: 597ms, 584ms, 583ms, 590ms, 588ms, 593ms, 588ms, 594ms, 593ms, 590ms
Ordered: 483ms, 489ms, 484ms, 480ms, 487ms, 495ms, 485ms, 483ms, 485ms, 482ms
Reverse: 490ms, 491ms, 486ms, 486ms, 482ms, 488ms, 484ms, 487ms, 488ms, 492ms
Array size: 10000000
Random: 6793ms, 6833ms, 6873ms, 6827ms, 6895ms, 6840ms, 6798ms, 6839ms, 6814ms, 6804ms
Nation: 0793ms, 0633ms, 0673ms, 0627ms, 0693ms, 0646ms, 0646ms, 0639ms, 0634ms, 0614ms, 0604ms
Ordered: 5677ms, 5622ms, 5662ms, 5599ms, 5608ms, 5700ms, 5634ms, 5719ms, 5622ms, 5619ms
Reverse: 5679ms, 5582ms, 5669ms, 5595ms, 5645ms, 5606ms, 5662ms, 5628ms, 5639ms, 5599ms
Algorithm: Quick Sort
Array size: 10
Arrav size: 100
Array size: 10000
Array size: 100000
Array size: 1000000
Random: 175ms, 176ms, 176ms, 174ms, 173ms, 176ms, 173ms, 173ms, 173ms, 0rdered: 53ms, 54ms, 52ms, 54ms, 53ms, 52ms, 53ms, 52ms, 53ms, 54ms, 54ms, 55ms, 56ms, 56ms, 56ms, 55ms, 55ms, 56ms, 56ms
```

Random: 2012ms, 1997ms, 2010ms, 2034ms, 2063ms, 1991ms, 2019ms, 2032ms, 1995ms, 2016ms Ordered: 608ms, 621ms, 607ms, 619ms, 610ms, 633ms, 610ms, 618ms, 604ms, 639ms Reverse: 631ms, 665ms, 640ms, 661ms, 644ms, 656ms, 648ms, 647ms, 634ms, 636ms

Array size: 10000000

```
The alignment of this section is a little off due to the escape sequences
Array size: 10
      В
            ı
                 S
                      M
                             Q
 Random: 0ms,
                 0ms,
                                      0ms
                        0ms,
                               0ms,
                                      0ms
 Ordered: 0ms,
                 0ms,
                        0ms.
                               0ms.
 Reverse: 0ms,
                        0ms,
                 0ms,
                               0ms,
                                      0ms
Array size: 100
      В
                 S
                      Μ
                            Q
 Random: 0ms,
                 0ms,
                        0ms,
                               0ms,
                                      0ms
 Ordered: 0ms.
                 0ms.
                        0ms.
                               0ms.
                                      0ms
 Reverse: 0ms,
                 0ms,
                        0ms,
                               0ms,
                                      0ms
Array size: 1000
      В
            1
                 S
                      M
                            Q
 Random: 4ms,
                 1ms,
                        1ms,
                               0ms,
                                      0ms
 Ordered: 1ms,
                 0ms,
                        1ms,
                               0ms.
                                      0ms
 Reverse: 4ms,
                 2ms.
                        1ms,
                               0ms,
                                      0ms
Array size: 10000
            ı
                 S
                       Μ
                             Q
      В
 Random: 417ms, 117ms, 167ms, 4ms,
                                          1ms
 Ordered: 150ms, 0ms,
                         178ms, 4ms,
                                        0ms
 Reverse: 456ms, 240ms, 164ms, 4ms,
                                         0ms
Array size: 100000
      В
                 S
                      Μ
                             Q
 Random: 42931ms, 12096ms, 16993ms, 54ms, 14ms
 Ordered: 14768ms, 0ms,
                          17178ms, 46ms, 4ms
 Reverse: 46047ms, 24111ms, 16500ms, 45ms, 4ms
Array size: 1000000
      В
                 S
                       M
                            Q
 Random: N/A,
                 N/A,
                       N/A,
                              583ms, 173ms
 Ordered: N/A,
                N/A,
                       N/A,
                             480ms, 52ms
 Reverse: N/A,
                N/A,
                       N/A,
                             482ms, 55ms
Array size: 10000000
      В
            Τ
                 S
                       M
                            Q
 Random: N/A,
                 N/A,
                       N/A,
                              6793ms, 1991ms
 Ordered: N/A,
                N/A,
                       N/A,
                             5599ms, 604ms
```

Reverse: N/A,

N/A,

N/A,

5582ms, 631ms

Array size:	10				
Airay 31201	В	I	S	М	Q
Random:	Oms,	Oms,	Oms,	Oms,	0ms
Ordered:	0ms,	0ms,	0ms,	0ms,	0ms
Reverse:	Oms,	Oms,	Oms,	Oms,	0ms
Array size:	100 B	I	S	М	Q
Random:	Oms,	Oms,	Oms,	Oms,	0ms
Ordered:	Oms,	Oms,	Oms,	Oms,	0ms
Reverse:	Oms,	Oms,	Oms,	Oms,	0ms
Array size:					
Day day.	B 4	I	S 1	M	Q
Random:	4ms,	1ms,	lms,	Oms,	0ms
Ordered: Reverse:	1ms, 4ms,	0ms, 2ms,	lms, lms,	Oms, Oms,	0ms 0ms
Neverse.	41113,	ZIII3,	III3,	onis,	UIIIS
Array size:	10000 B	I	S	М	Q
Random:	417ms,	117ms,	167ms,	4ms,	1 ms
Ordered:	150ms,	Oms,	178ms,	4ms,	0ms
Reverse:	456ms,	240ms,	164ms,	4ms,	0ms
Array size:		T	C	• •	
Random:	B 42931ms,	I 12096ms,	S 16003mc	M 5/mc	Q 1/ms
Ordered:			16993ms, 17178ms,		14ms 4ms
Reverse:				45ms,	
Array size:					
,	В	I	S	М	Q
Random:		N/A,	N/A,	583ms,	
Ordered:		N/A,	N/A,	480ms,	
Reverse:	N/A,	N/A,	N/A,	482ms,	55ms
Array size:		T	C	N/A	0
Random:	B N/A,	I N/A,	S N/A,	M 6793ms,	Q 1991ms
	N/A,	N/A,	N/A,	5599ms,	
Reverse:		N/A,	N/A,	5582ms,	