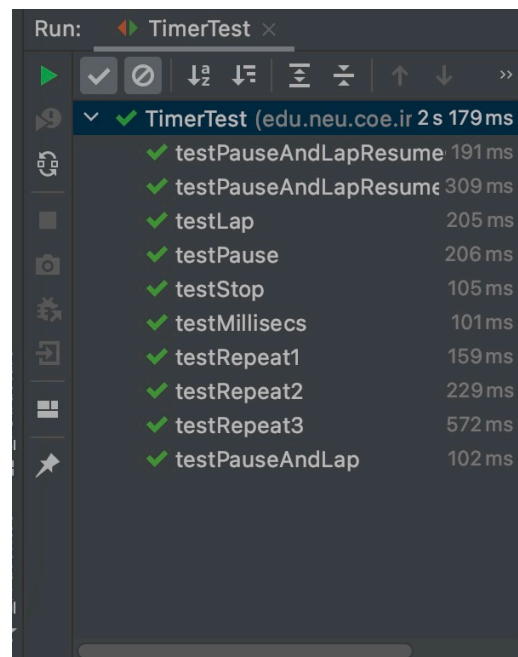
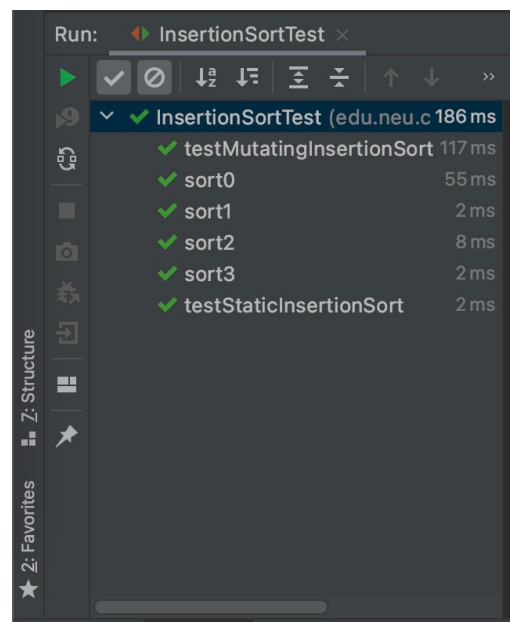


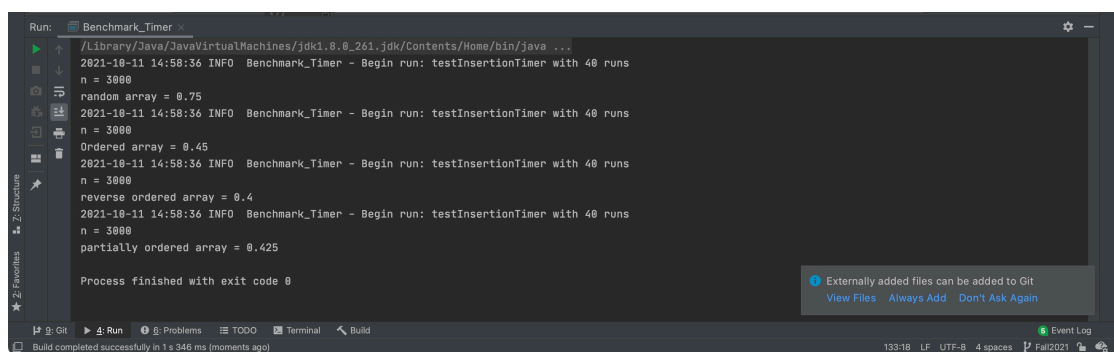
1. Unit Test Result:



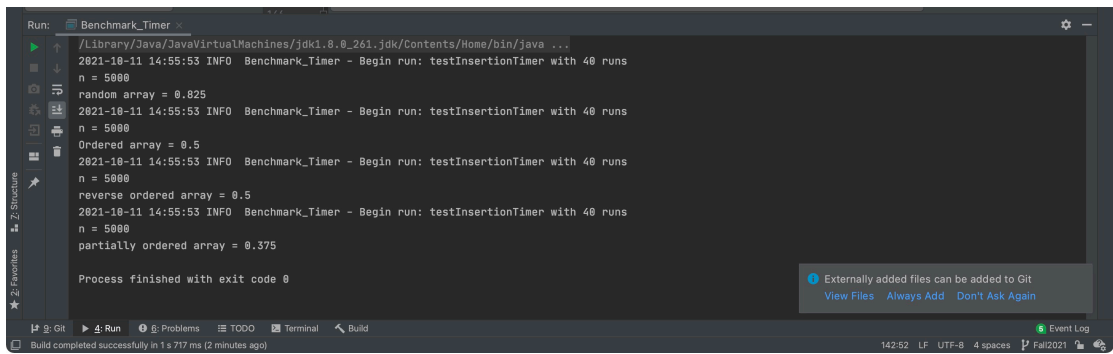
2. Unit Test Result:



3. Test 5 different number of n:
When n=3000:



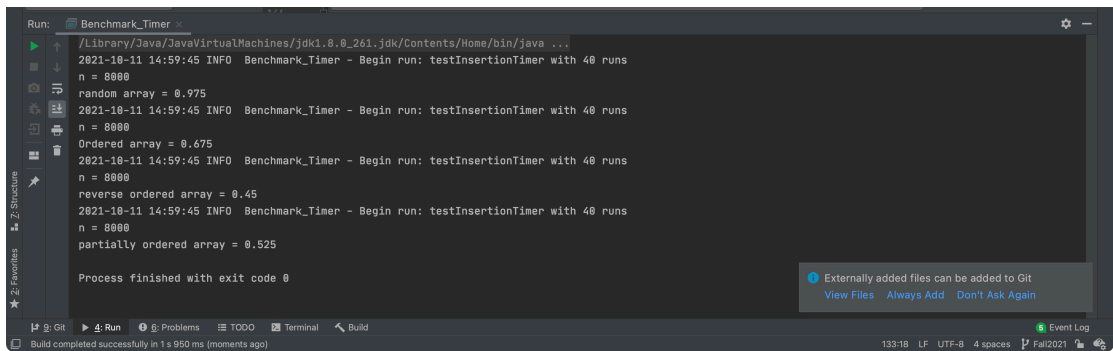
When n=5000:



```
Run: Benchmark_Timer
/Library/Java/JavaVirtualMachines/jdk1.8.0_261.jdk/Contents/Home/bin/java ...
2021-10-11 14:55:53 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 5000
random array = 0.825
2021-10-11 14:55:53 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 5000
Ordered array = 0.5
2021-10-11 14:55:53 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 5000
reverse ordered array = 0.5
2021-10-11 14:55:53 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 5000
partially ordered array = 0.375
Process finished with exit code 0
```

Build completed successfully in 1 s 717 ms (2 minutes ago)

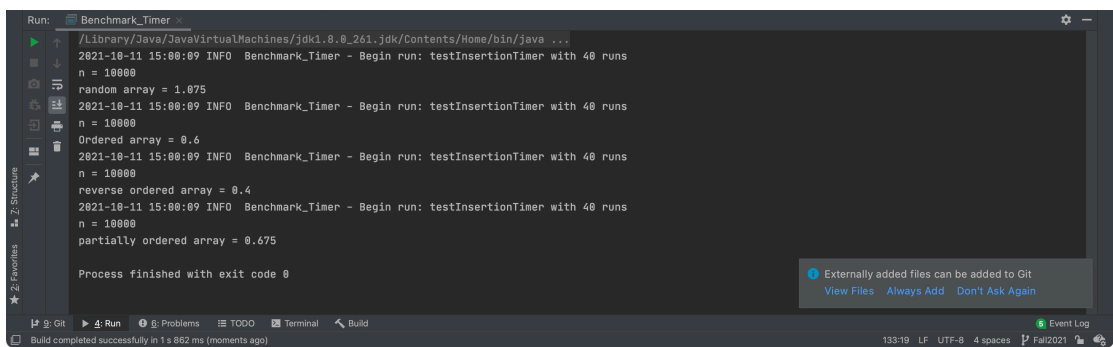
When n=8000:



```
Run: Benchmark_Timer
/Library/Java/JavaVirtualMachines/jdk1.8.0_261.jdk/Contents/Home/bin/java ...
2021-10-11 14:59:45 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 8000
random array = 0.975
2021-10-11 14:59:45 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 8000
Ordered array = 0.675
2021-10-11 14:59:45 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 8000
reverse ordered array = 0.45
2021-10-11 14:59:45 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 8000
partially ordered array = 0.525
Process finished with exit code 0
```

Build completed successfully in 1 s 950 ms (moments ago)

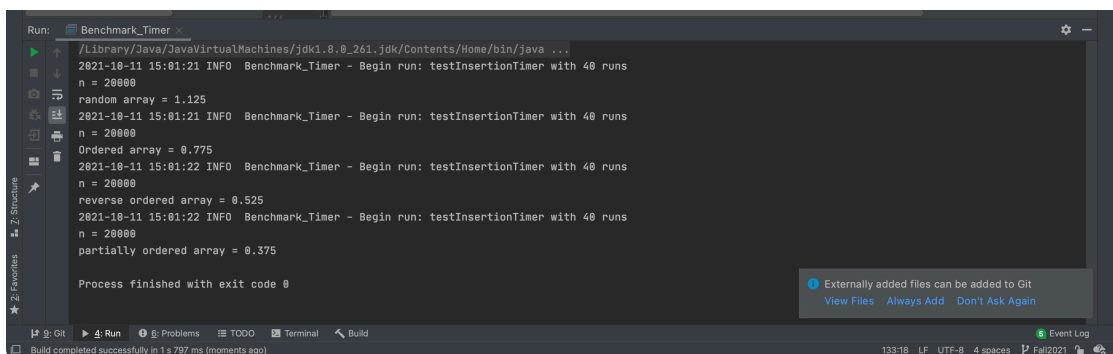
When n=10000:



```
Run: Benchmark_Timer
/Library/Java/JavaVirtualMachines/jdk1.8.0_261.jdk/Contents/Home/bin/java ...
2021-10-11 15:00:09 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 10000
random array = 1.075
2021-10-11 15:00:09 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 10000
Ordered array = 0.6
2021-10-11 15:00:09 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 10000
reverse ordered array = 0.4
2021-10-11 15:00:09 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 10000
partially ordered array = 0.675
Process finished with exit code 0
```

Build completed successfully in 1 s 862 ms (moments ago)

When n=20000:



```
Run: Benchmark_Timer
/Library/Java/JavaVirtualMachines/jdk1.8.0_261.jdk/Contents/Home/bin/java ...
2021-10-11 15:01:21 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 20000
random array = 1.125
2021-10-11 15:01:21 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 20000
Ordered array = 0.775
2021-10-11 15:01:22 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 20000
reverse ordered array = 0.525
2021-10-11 15:01:22 INFO Benchmark_Timer - Begin run: testInsertionTimer with 40 runs
n = 20000
partially ordered array = 0.375
Process finished with exit code 0
```

Build completed successfully in 1 s 797 ms (moments ago)

In sum, the random array costs the most time. And other three kinds of array cost less time.