```
C:\DEEPAK\infs 519\hw1>javac infs519hw1.java

C:\DEEPAK\infs 519\hw1>java infs519hw1 A1-1000-integers.txt


Start of 100-integers file

START OF QUICK SORT
duration=132146
END OF QUICK SORT

START OF INSERTION SORT
Inversions:2662
duration=863862
END OF INSERTION SORT

START OF BUBBLE SORT
inversions=2637
duration=1202137
END OF BUBBLE SORT


Start of 1000-almost-sorted file

START OF QUICK SORT
duration=856591
END OF QUICK SORT

START OF INSERTION SORT
Inversions:621
duration=479828
END OF INSERTION SORT

START OF BUBBLE SORT
inversions=568
duration=12742389
END OF BUBBLE SORT


Start of 1000-integers file

START OF QUICK SORT
duration=257448
END OF QUICK SORT

START OF INSERTION SORT
Inversions:249834
duration=7416382
END OF INSERTION SORT

START OF BUBBLE SORT
inversions=222531
duration=4442473
END OF BUBBLE SORT


Start of 10000-integers file
```
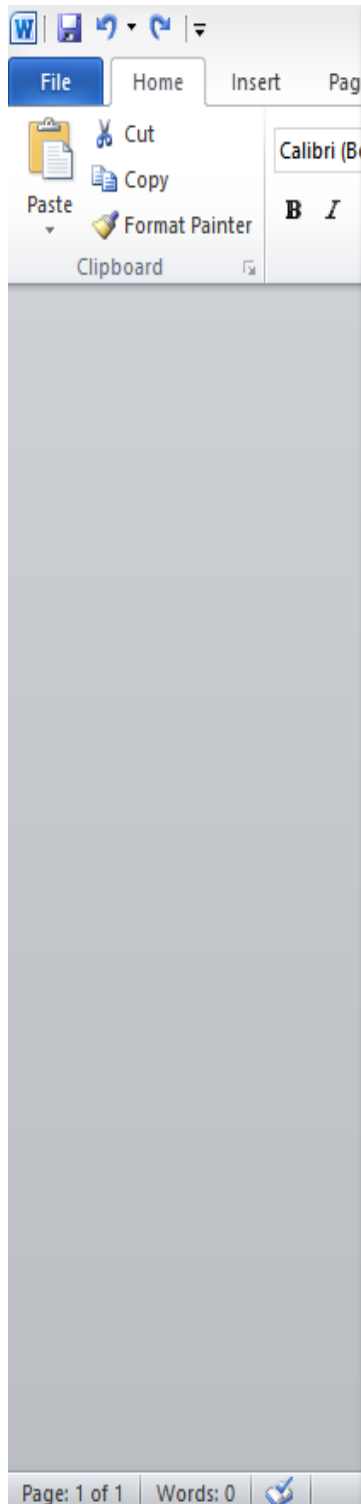
```
Start of 10000-integers file

START OF QUICK SORT
duration=2002705
END OF QUICK SORT

START OF INSERTION SORT
Inversions:25046158
duration=60125636
END OF INSERTION SORT

START OF BUBBLE SORT
inversions=22456612
duration=181465289
END OF BUBBLE SORT


Start of 100000-integers file

START OF QUICK SORT
duration=11018942
END OF QUICK SORT

START OF INSERTION SORT
Inversions:2501541356
duration=1211452413
END OF INSERTION SORT

START OF BUBBLE SORT
inversions=2247504714
duration=16807644065
END OF BUBBLE SORT

Start of command line file

START OF QUICK SORT
duration=104348
END OF QUICK SORT

START OF INSERTION SORT
Inversions:249834
duration=1967638
END OF INSERTION SORT

START OF BUBBLE SORT
inversions=222531
duration=2782319
END OF BUBBLE SORT

C:\DEEPAK\infs 519\hw1>
```

Since the duration varies little from execution to execution, the values in the table and in the screenshot may vary little as a took the screenshot of another execution. However there isn't vast difference between them.