Question 1

This question refers to the t3.asm file.

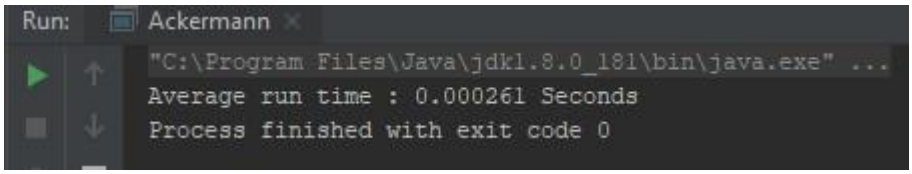
Question 2

```
Results for register set 6
Ackermann result           : 509
Procedure calls            : 172233
Max Register Window Depth  : 511
Register file Overflow     : 84885
Register file Underflow    : 84885

Results for register set 8
Ackermann result           : 509
Procedure calls            : 172233
Max Register Window Depth  : 511
Register file Overflow     : 83911
Register file Underflow    : 83911

Results for register set 16
Ackermann result           : 509
Procedure calls            : 172233
Max Register Window Depth  : 511
Register file Overflow     : 80142
Register file Underflow    : 80142
PS D:\Documents\GitHub\compArch2>
```

Each register set has the same values for ackermann result, procedure calls and max register window depth. Overflow and underflow are equal each time meaning the program is running as expected.

This question used the ackermannCount.java file.

Question 3



I cut out the code for calculating results for Q2, and only ran the ackermann(3, 6) function for this question. This question used the ackermann.java file.

I have a loop which executes the function 10,000 times and calculates the average runtime. Which turned out to be 0.000261 seconds when converted from nanoseconds.

The accuracy seems to be consistent with more tests, in the sense that every time I ran the program the result was always around the +- 0.000260 seconds region. I think running the function 10,000 times each time is enough to get a good average run-time.