Q2 and Q3:
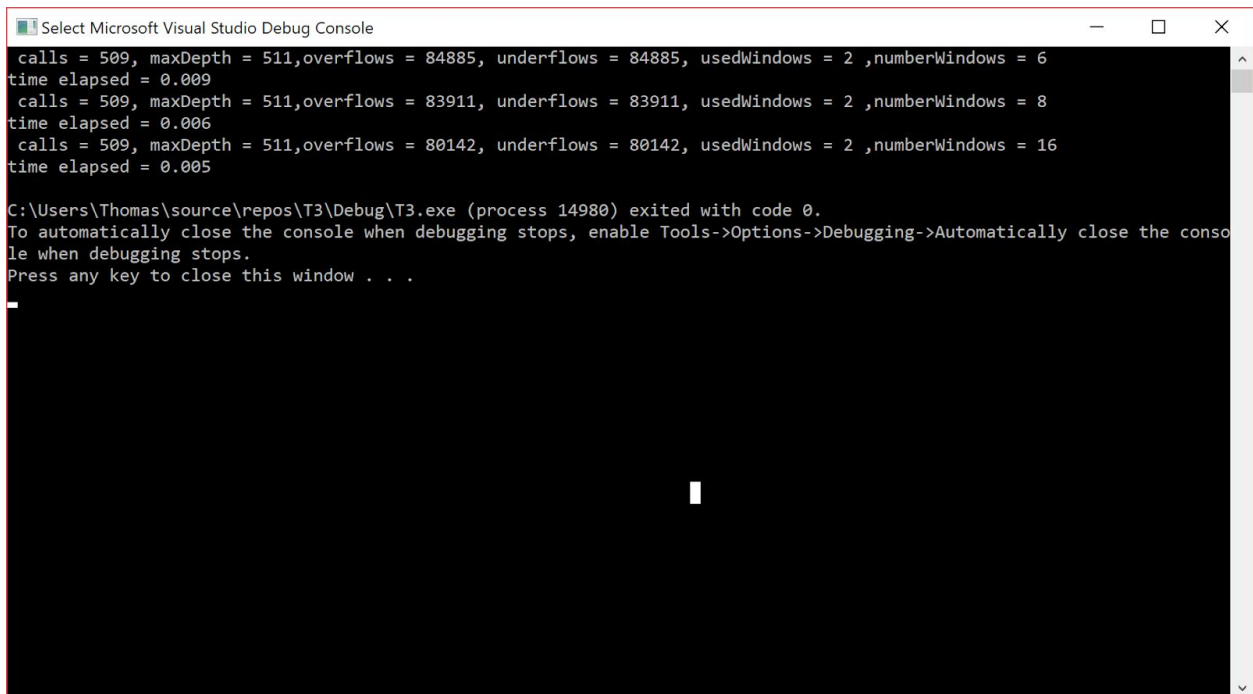
Tutorial 3 Output:

Below is output of ackermann(3,6) test with 6, 8 and 16 register sets respectively.
Time elapsed in milliseconds.

```
■ Select Microsoft Visual Studio Debug Console                                          —    □    ×
 calls = 509, maxDepth = 511,overflows = 84885, underflows = 84885, usedWindows = 2 ,numberWindows = 6
time elapsed = 0.009
 calls = 509, maxDepth = 511,overflows = 83911, underflows = 83911, usedWindows = 2 ,numberWindows = 8
time elapsed = 0.006
 calls = 509, maxDepth = 511,overflows = 80142, underflows = 80142, usedWindows = 2 ,numberWindows = 16
time elapsed = 0.005

C:\Users\Thomas\source\repos\T3\Debug\T3.exe (process 14980) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the conso
le when debugging stops.
Press any key to close this window . . .
```

Method and Accuracy:
(Tests run on a Microsoft Surface Pro 4 with 2.4GHz Intel Core i5-6300U CPU.)

The variables such as calls,windows ,overflows etc are calculated using sample ackermann function given in pdf to increment/decrement variables according to the ackermann function (as seen in T3.cpp).

To calculate the time elapsed for the ackermann function, the "time.h" clock was used to record the start time of the function call and the end time after the function has returned. These results are then subtracted from each other to give the time elapsed.

This method could be more accurate due to the fact that it is very machine dependant i.e different CPUs will have vastly differing times, also the method only calculates time to a few decimal places which is not ideal as more decimal places would offer greater accuracy. Finally, the machine I was using to run the tests was also running other programs/services such as chrome, spotify, windows-updater etc which would affect the results by a small margin.