Program Structures & Algorithms

Spring 2022

Assignment No. 3
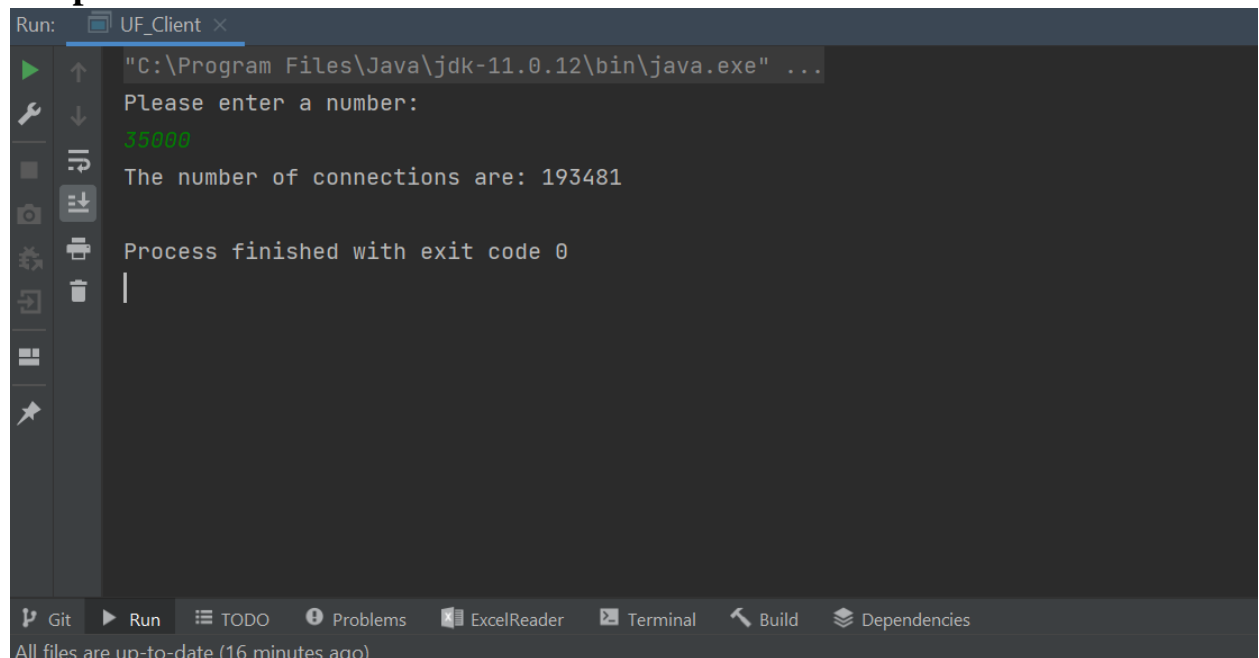
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- **Task**
  Part 1: implement UF_HWQUPC class
  Part 2: create a union find client class including main method
  Part 3: determine the relationship between n and m and prove it.
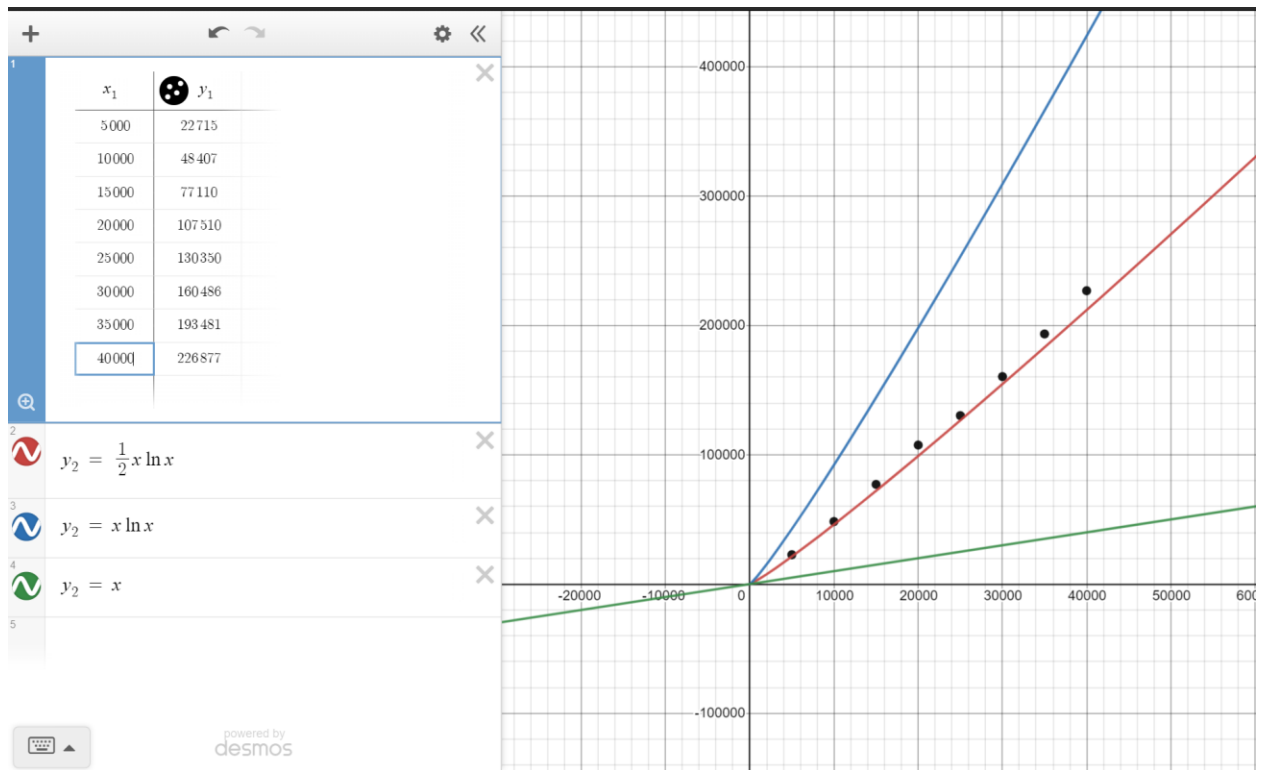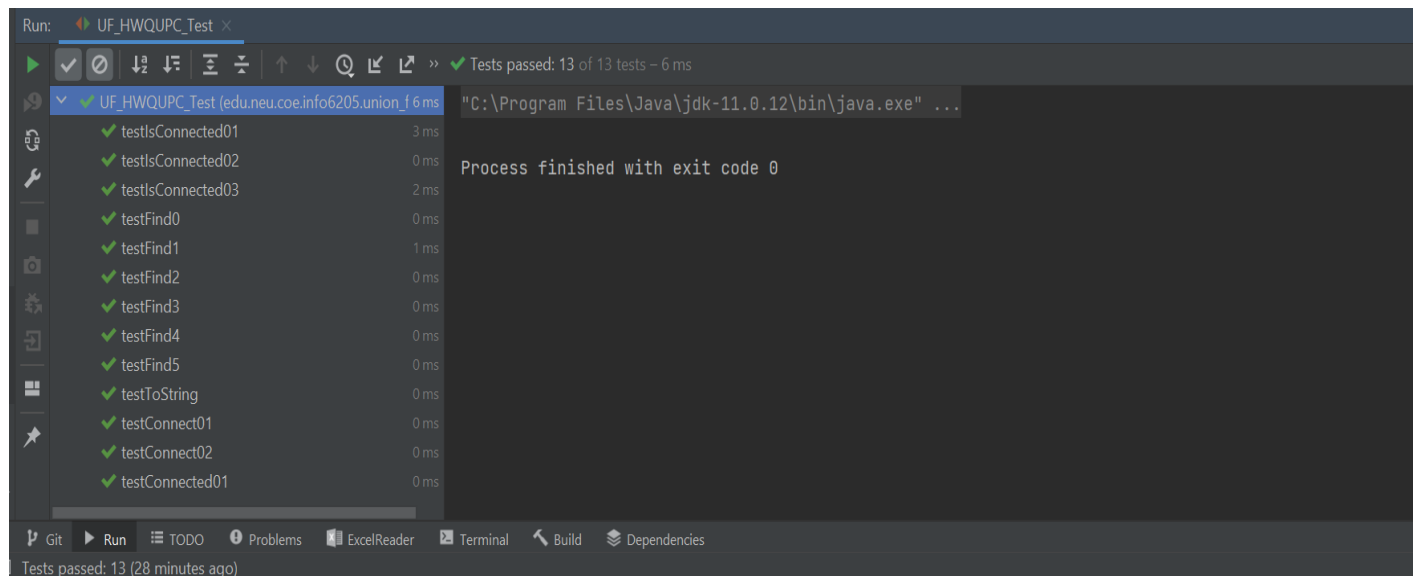- **Output screenshot**

- **Relationship Conclusion**

According to the graph, the relationship between x and y is $y = 1/2x\ln x$ since its' tendency is more close to the tendency of $y = 1/2x\ln x$.

- **Evidence / Graph**

- **Unit tests result**

Run: WQUPCTest ✕

▶ ✓ ⊘ ↓² ↓ ☰ ☰ ↑ ↓ ⊕ ↙ ↗ » ✓ Tests passed: 6 of 6 tests – 14 ms

✓ WQUPCTest (edu.neu.coe.info6205.union_find) 14 ms | "C:\Program Files\Java\jdk-11.0.12\bin\java.exe" ...
✓ testFind0 — 12 ms
✓ testFind1 — 1 ms | Process finished with exit code 0
✓ testFind2 — 0 ms
✓ testFind3 — 0 ms
✓ testFind4 — 1 ms
✓ testConnected01 — 0 ms

Tests passed: 6

⑂ Git ▶ Run ☰ TODO ❶ Problems ▦ ExcelReader ⊵ Terminal ⚒ Build ⬢ Dependencies
Show passed tests