Task 1

What is a thread and a Process?

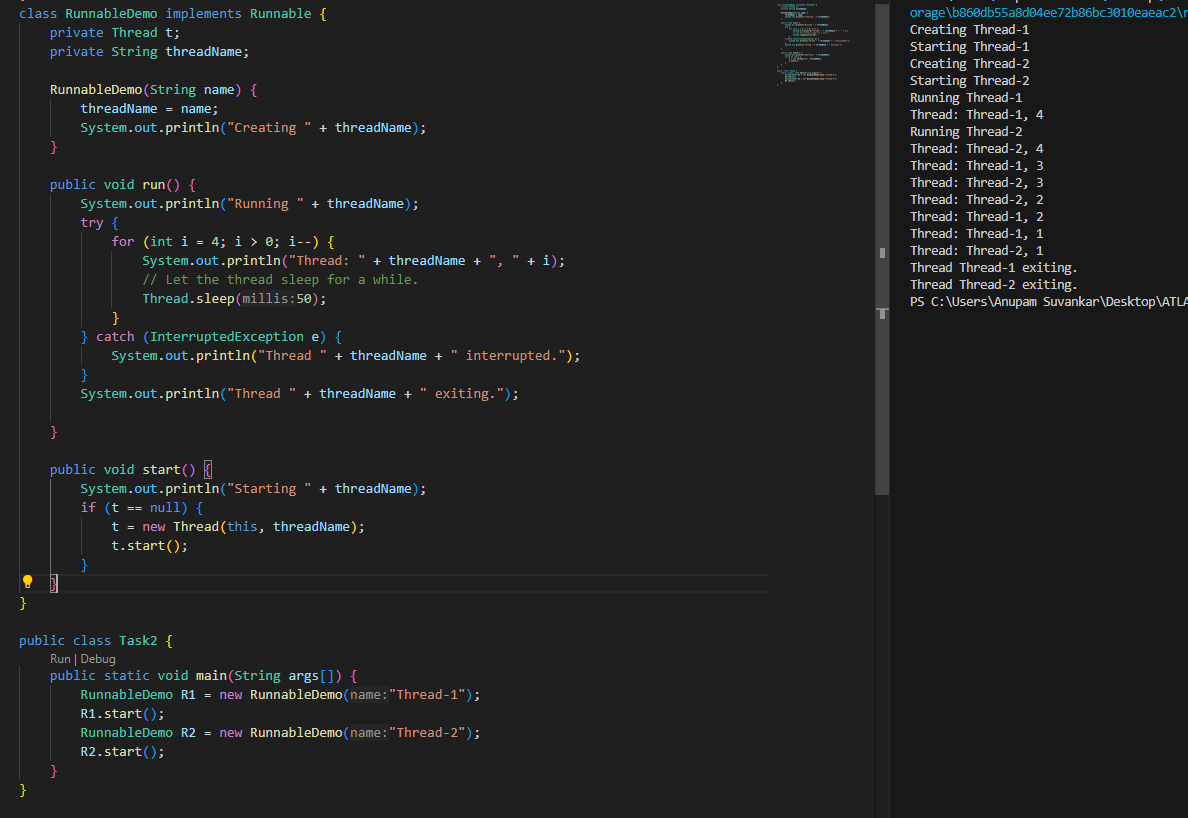
A process is an independent program in execution. It has:

Its own memory space

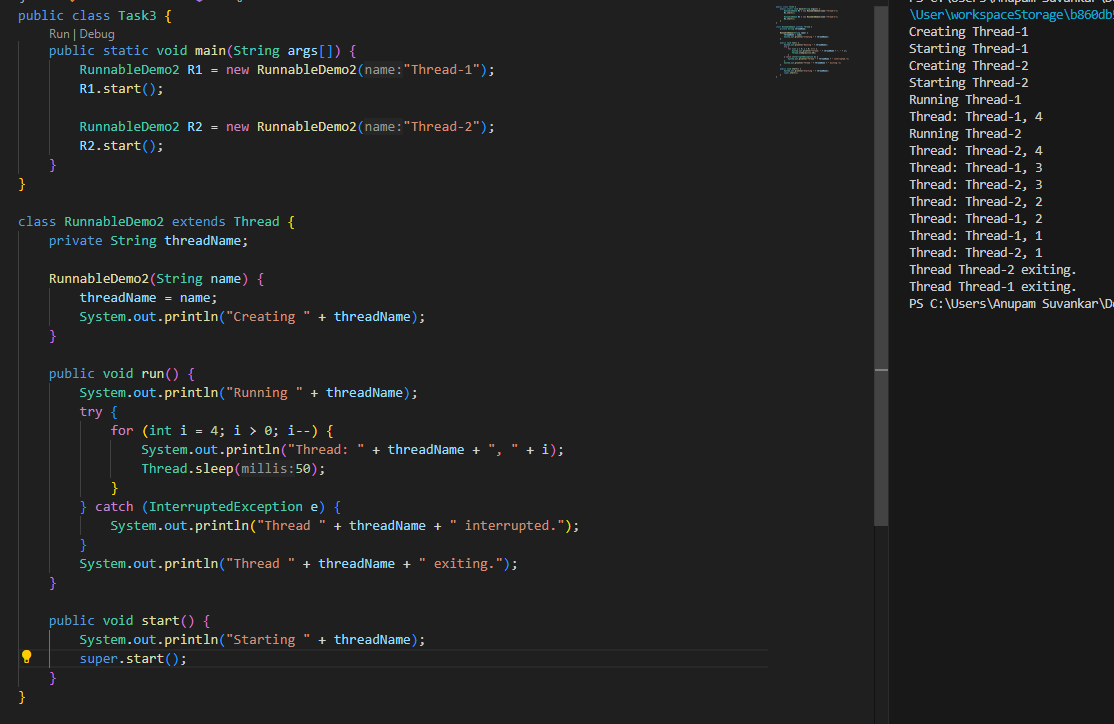
Its own resources (e.g., open files, CPU time)

A thread is the smallest unit of execution within a process. Multiple threads can run in parallel within a single process.

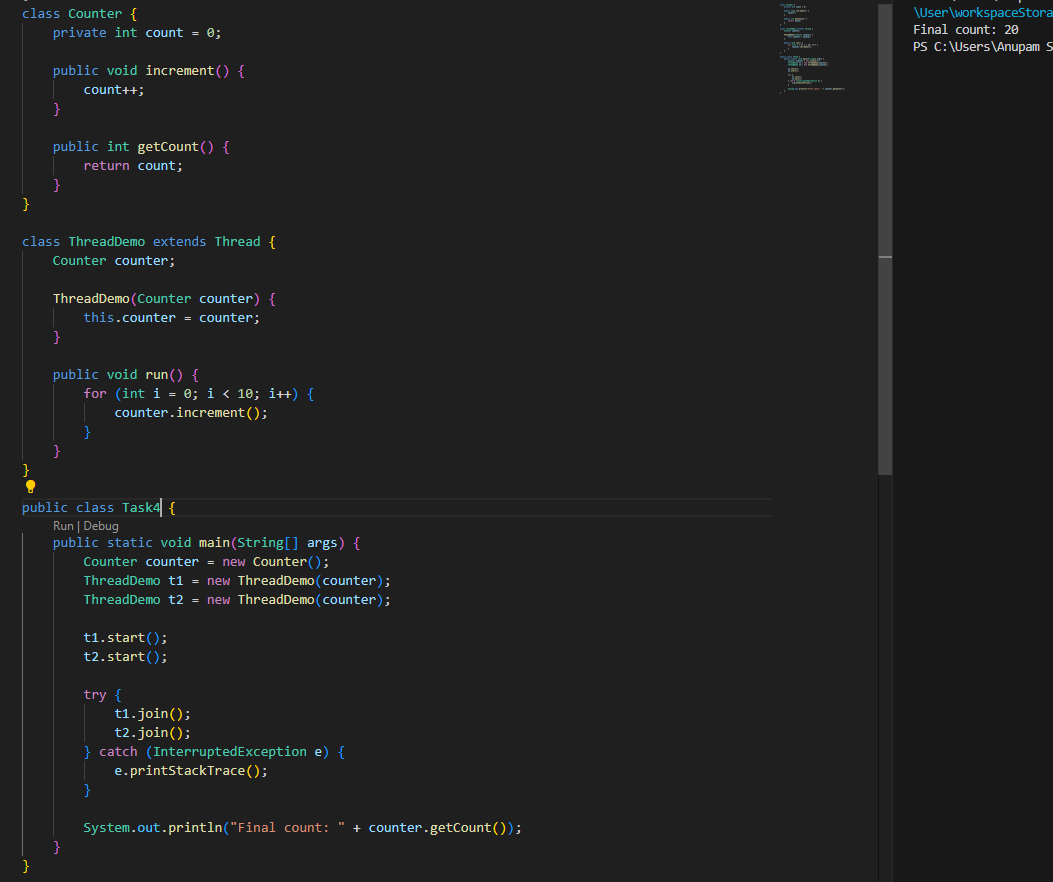
Task 2



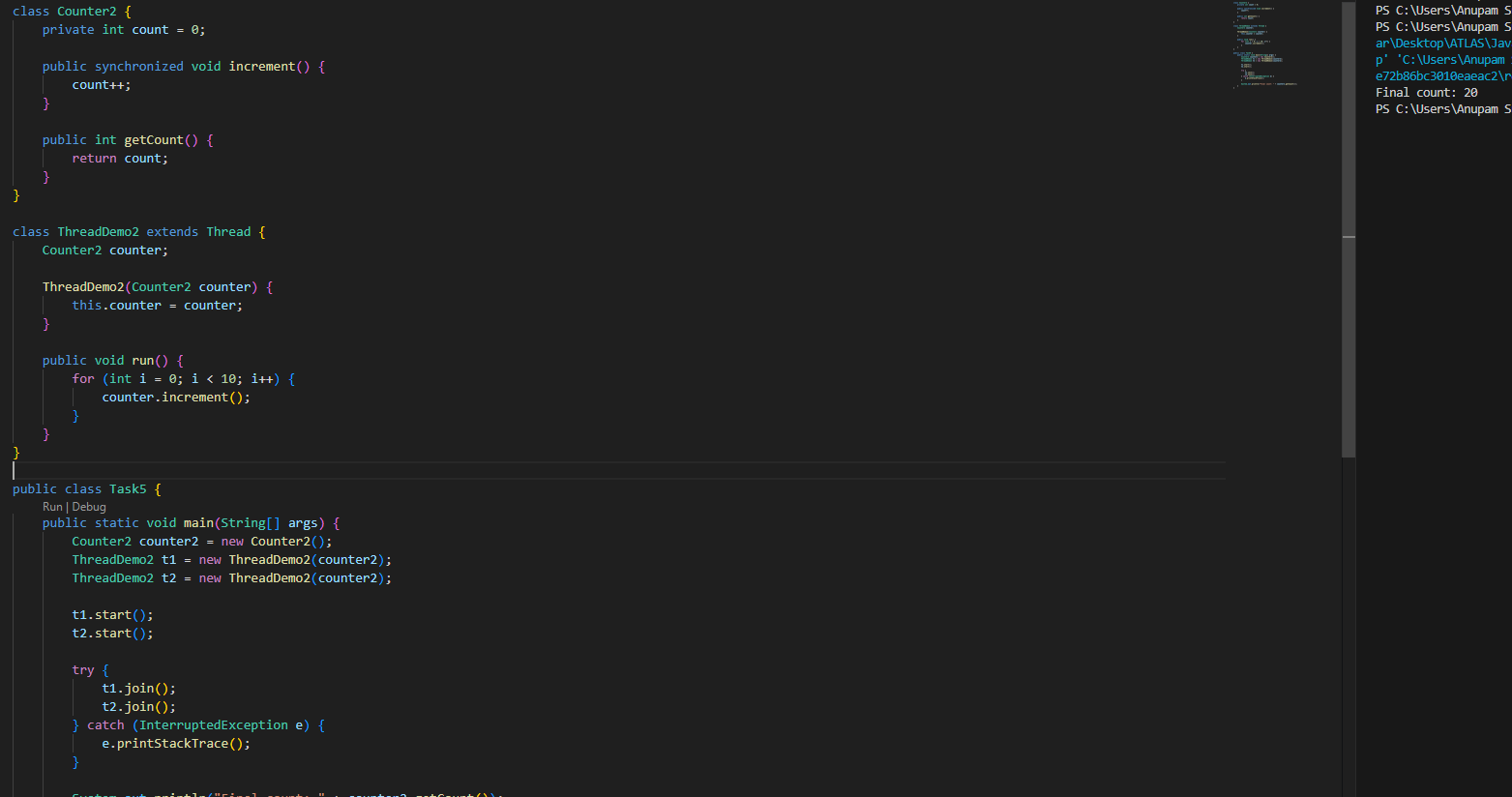
Task 3



Task 4



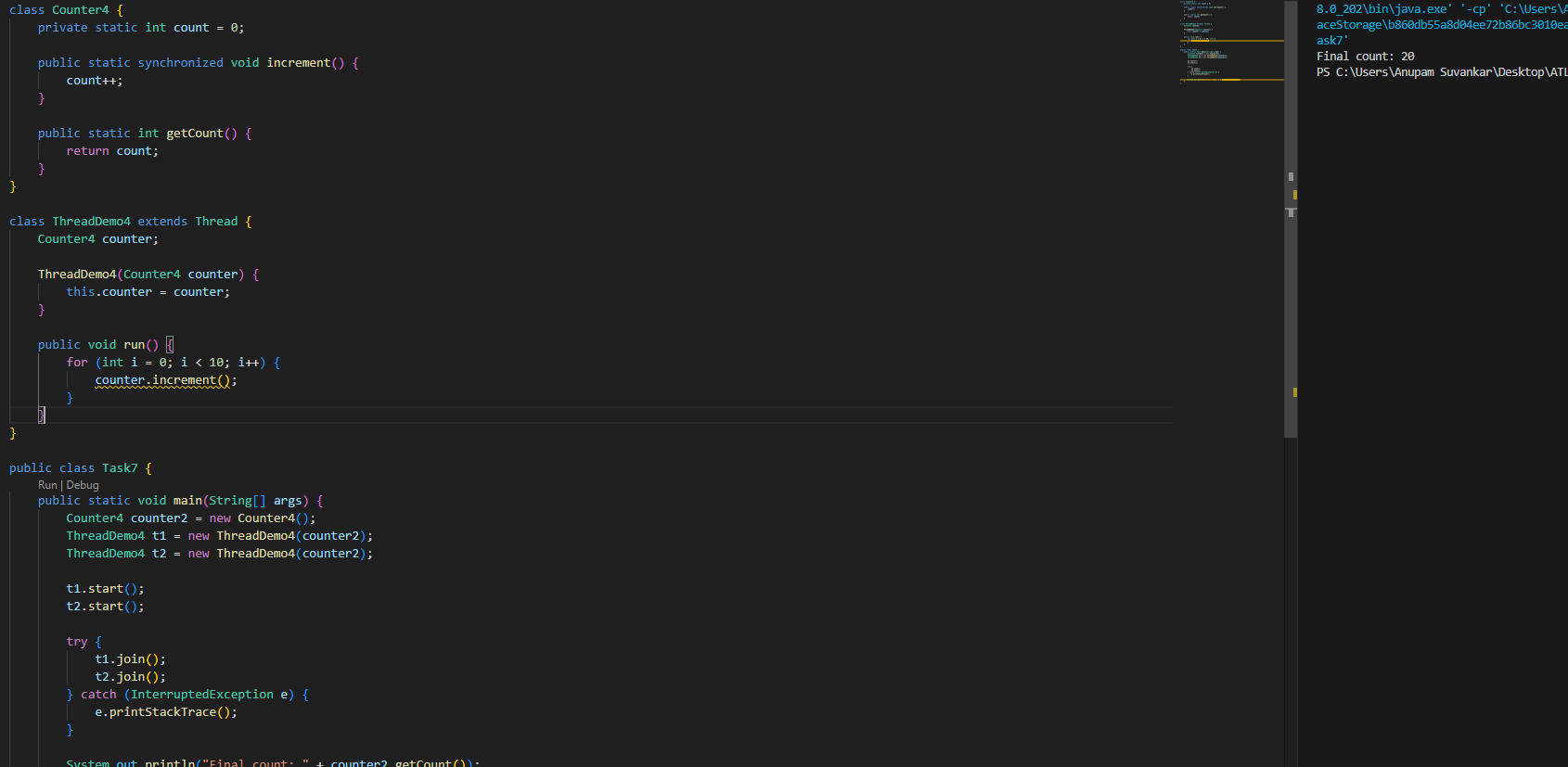
Task 5



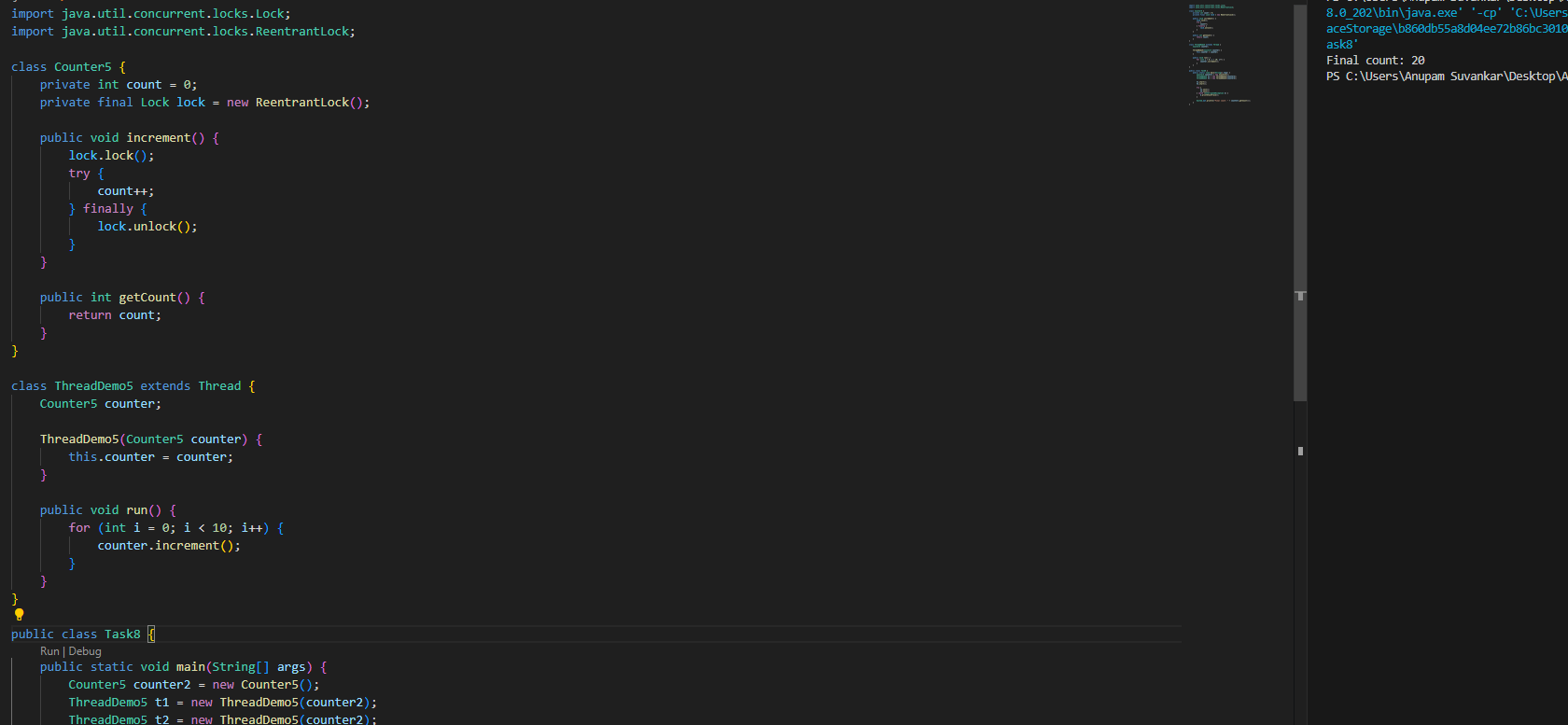
Task 6



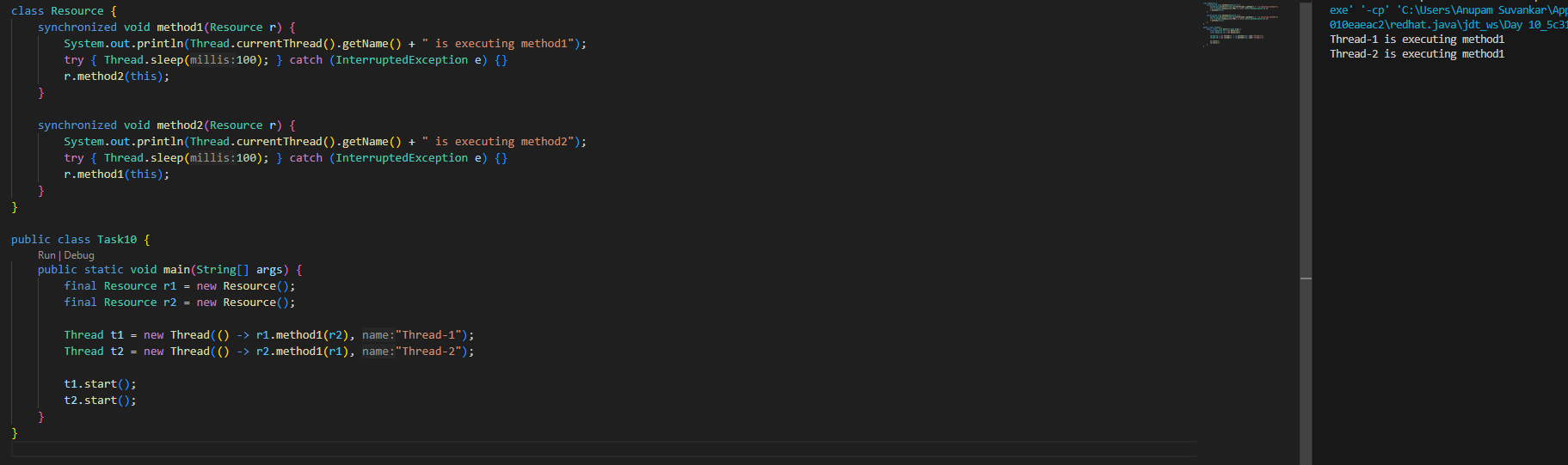
Task 7



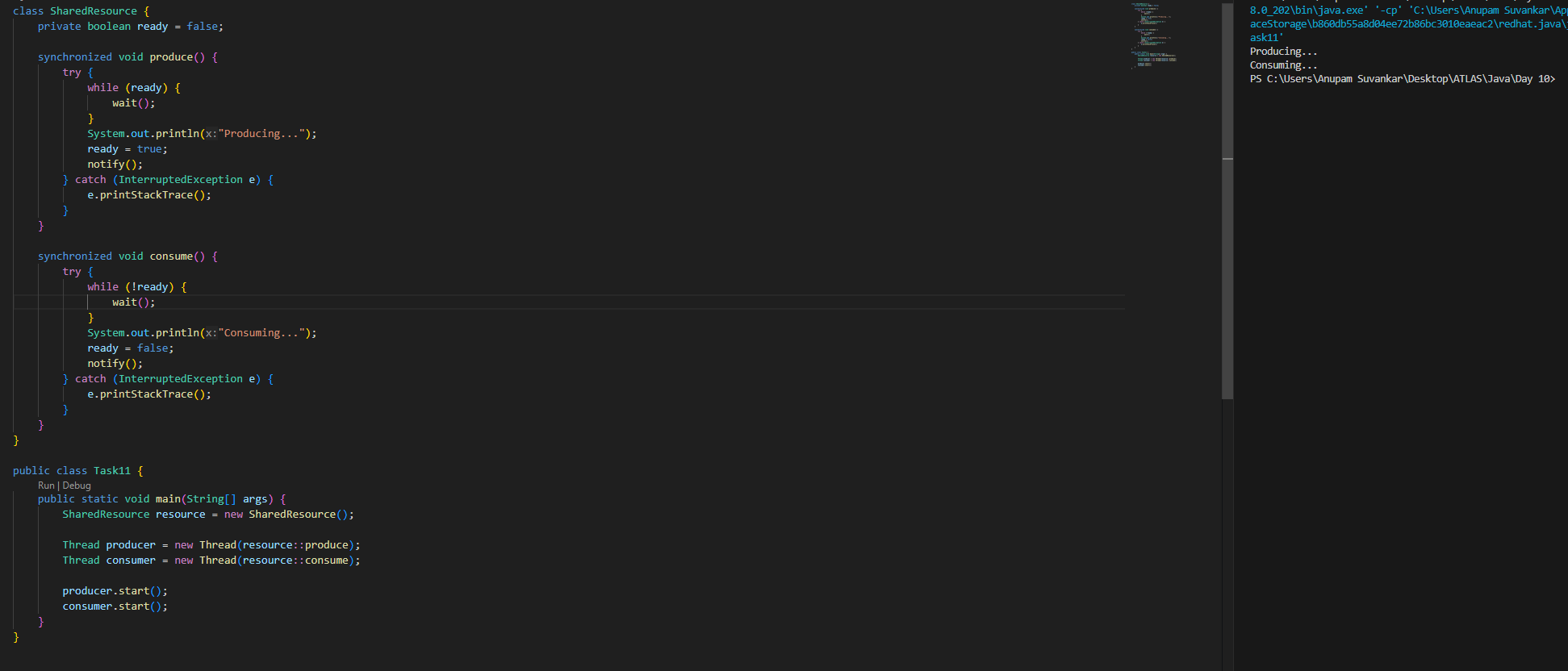
Task 8



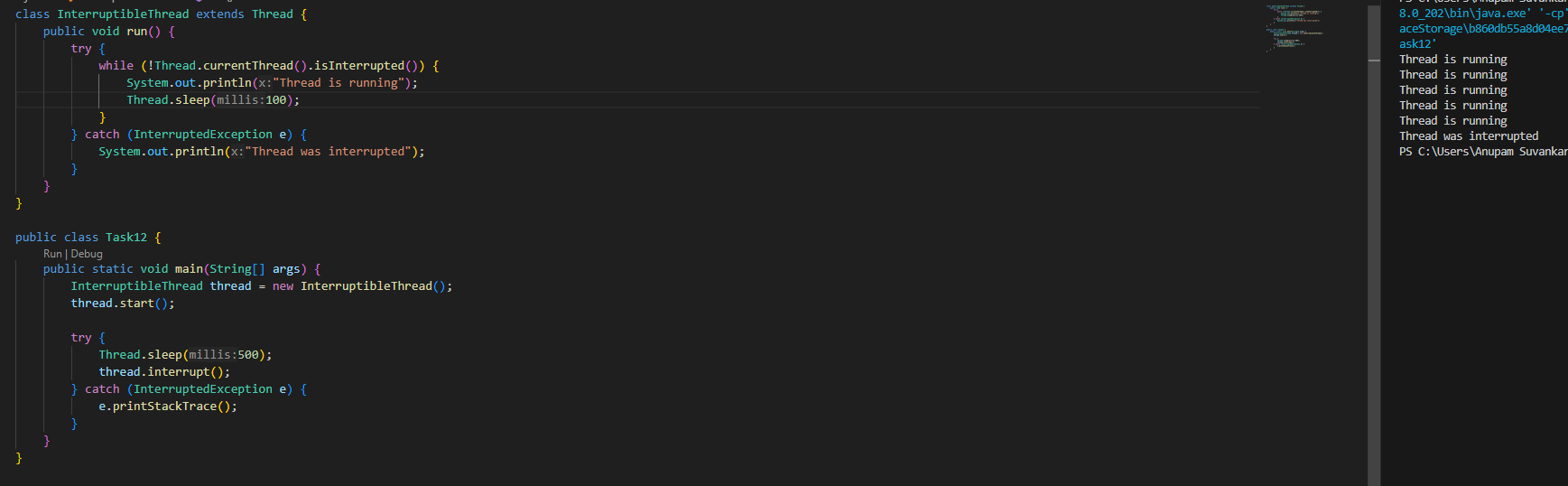
Task 10



Task 11



Task 12

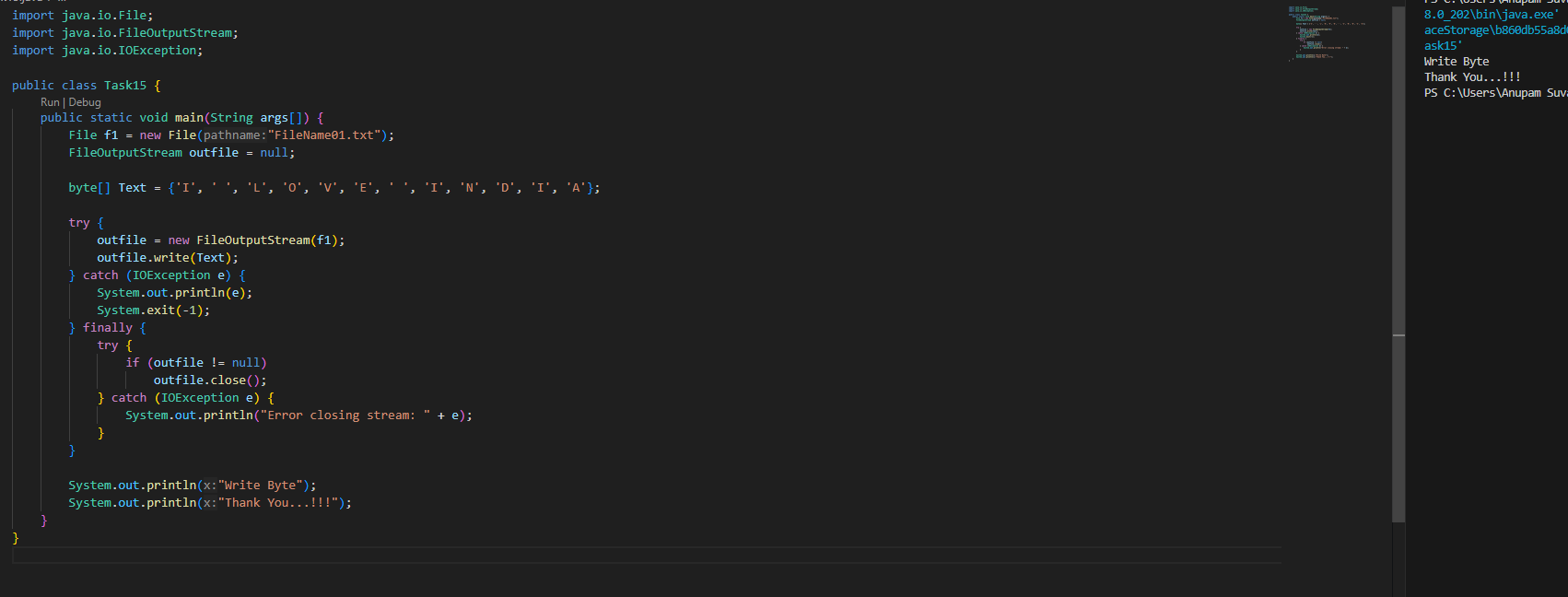


Task 14

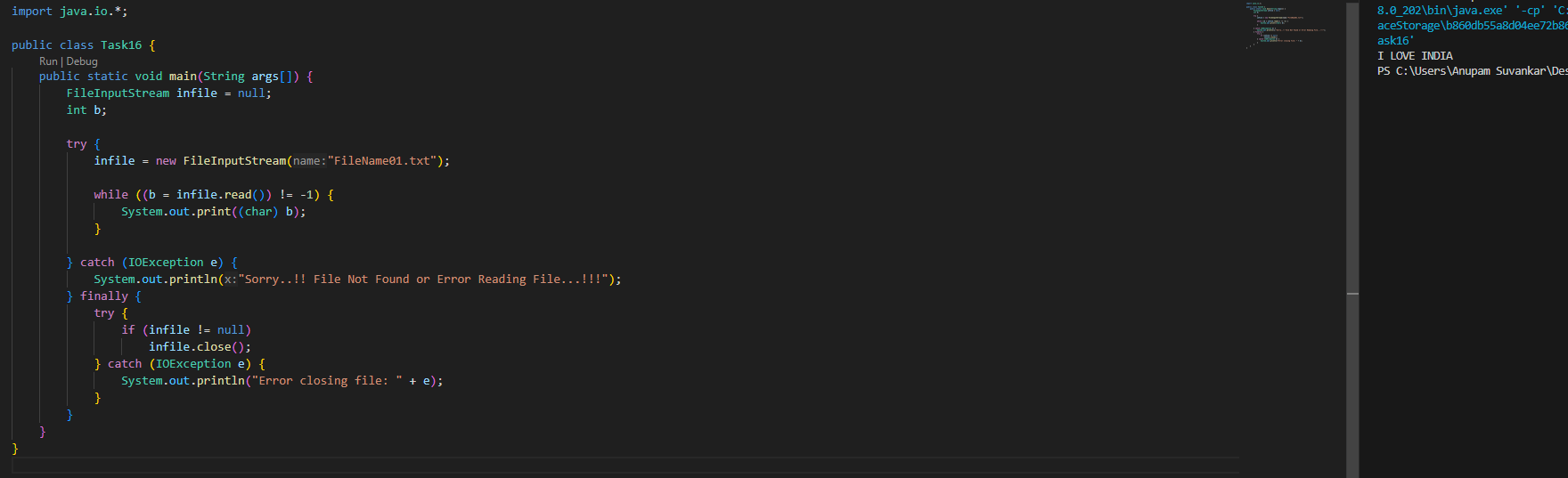
What is Thread pool?

A Thread Pool is a concept used to manage a collection of reusable threads for executing tasks efficiently in multithreaded applications. Its is a group of pre-instantiated, idle threads that stand ready to execute tasks.

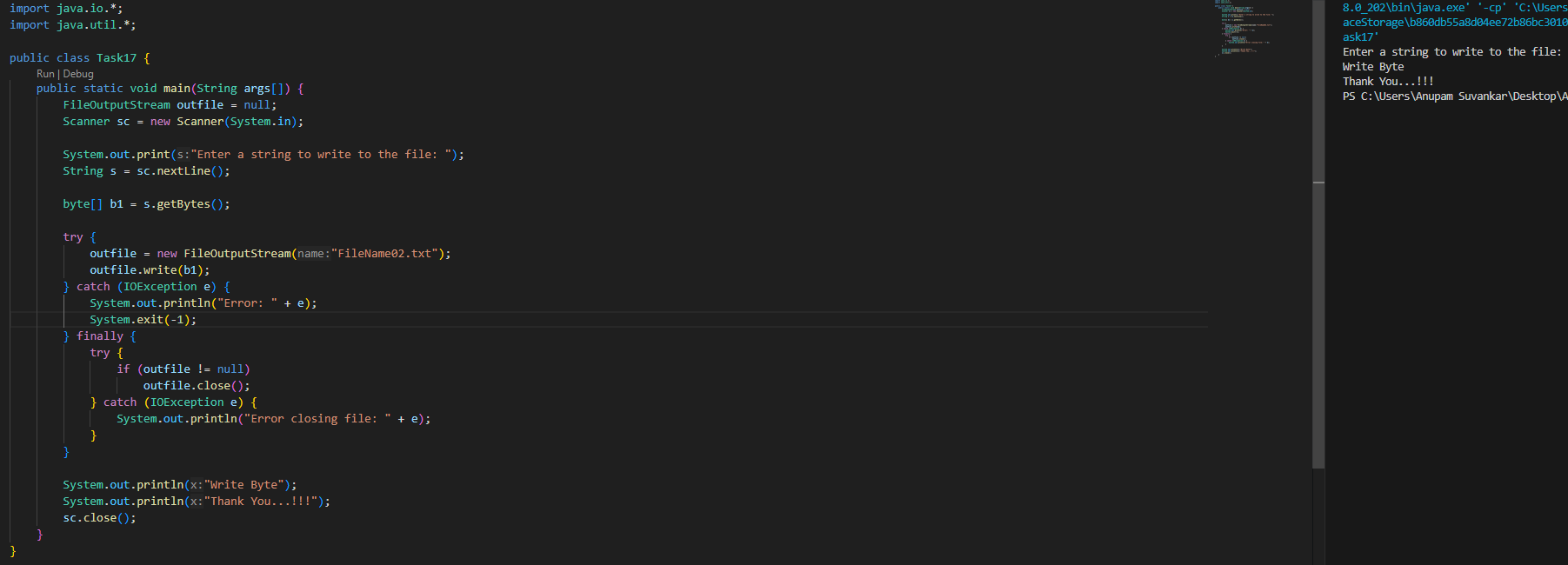
Task 15



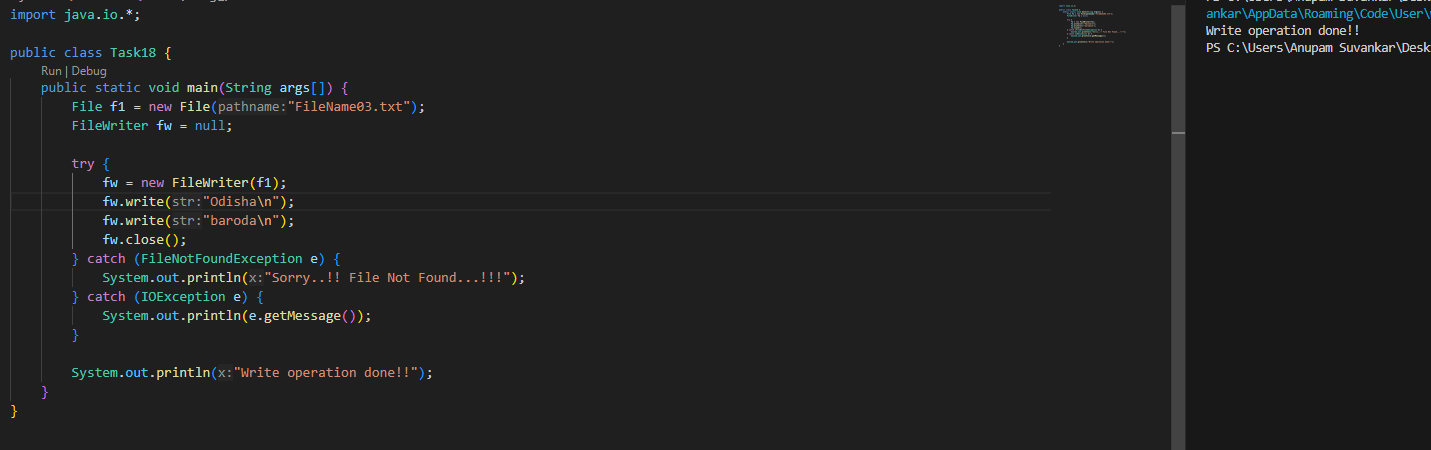
Task 16



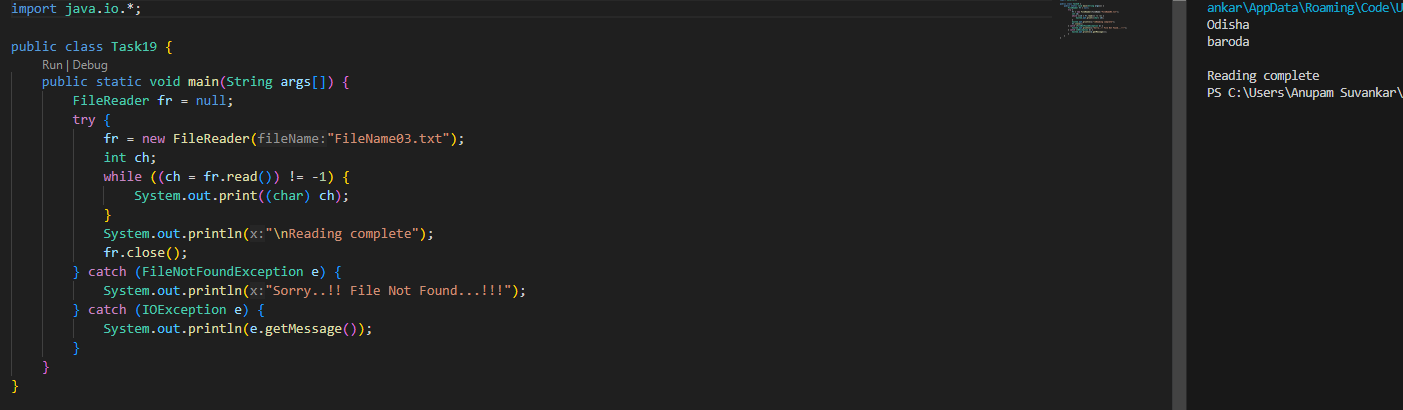
Task 17



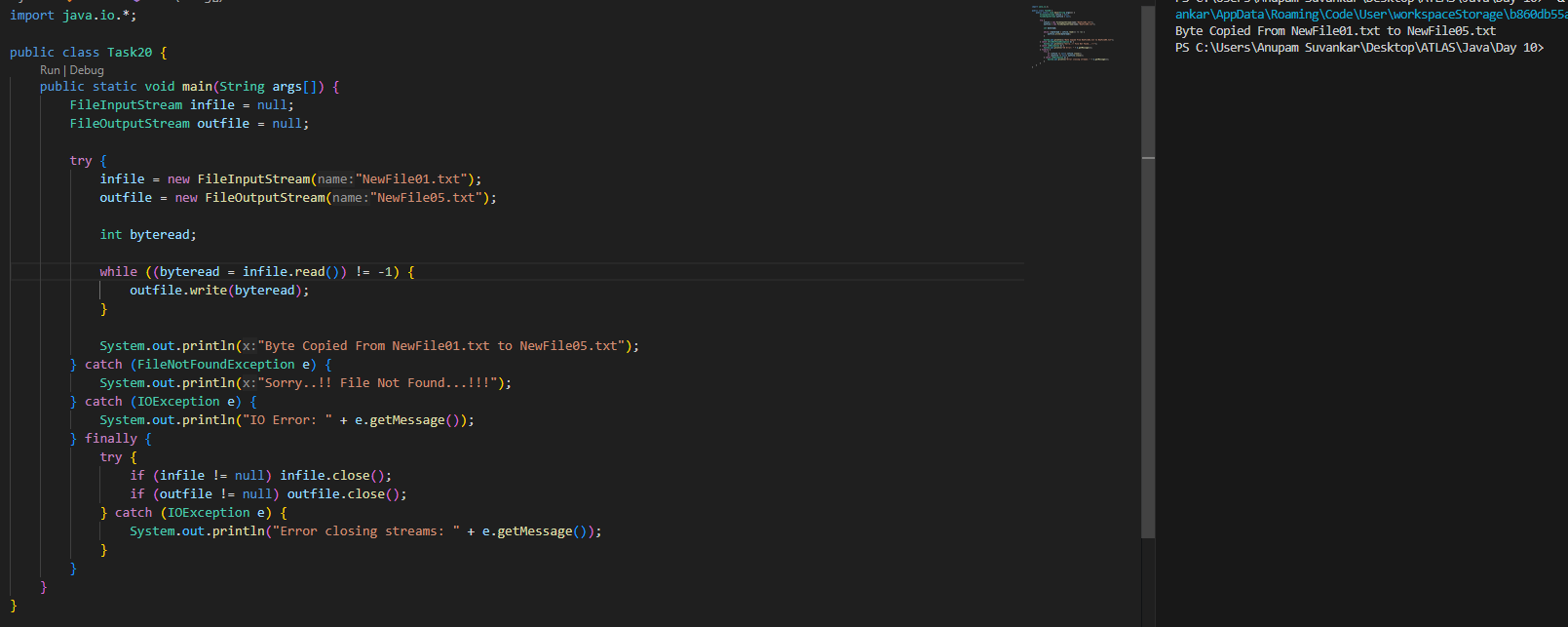
Task 18



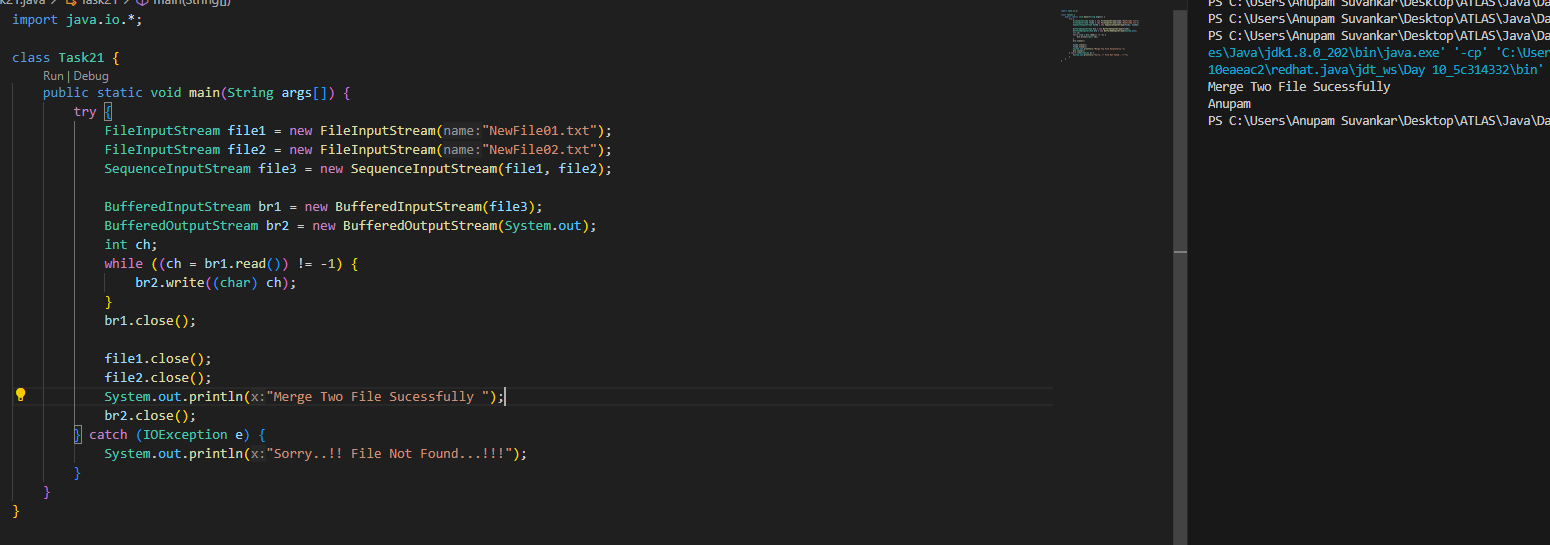
Task 19



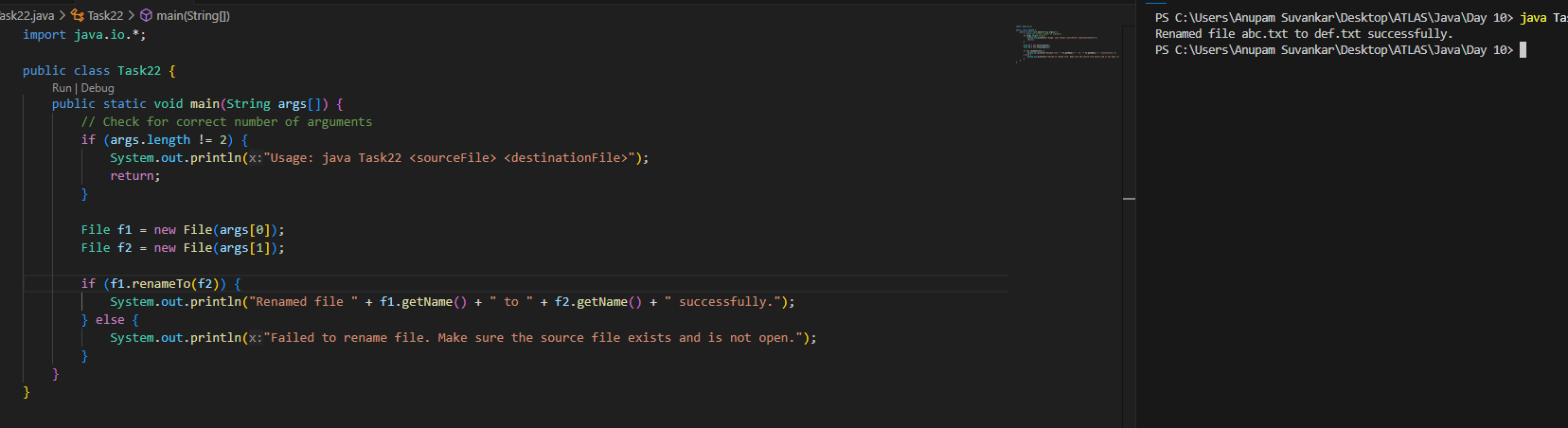
Task 20



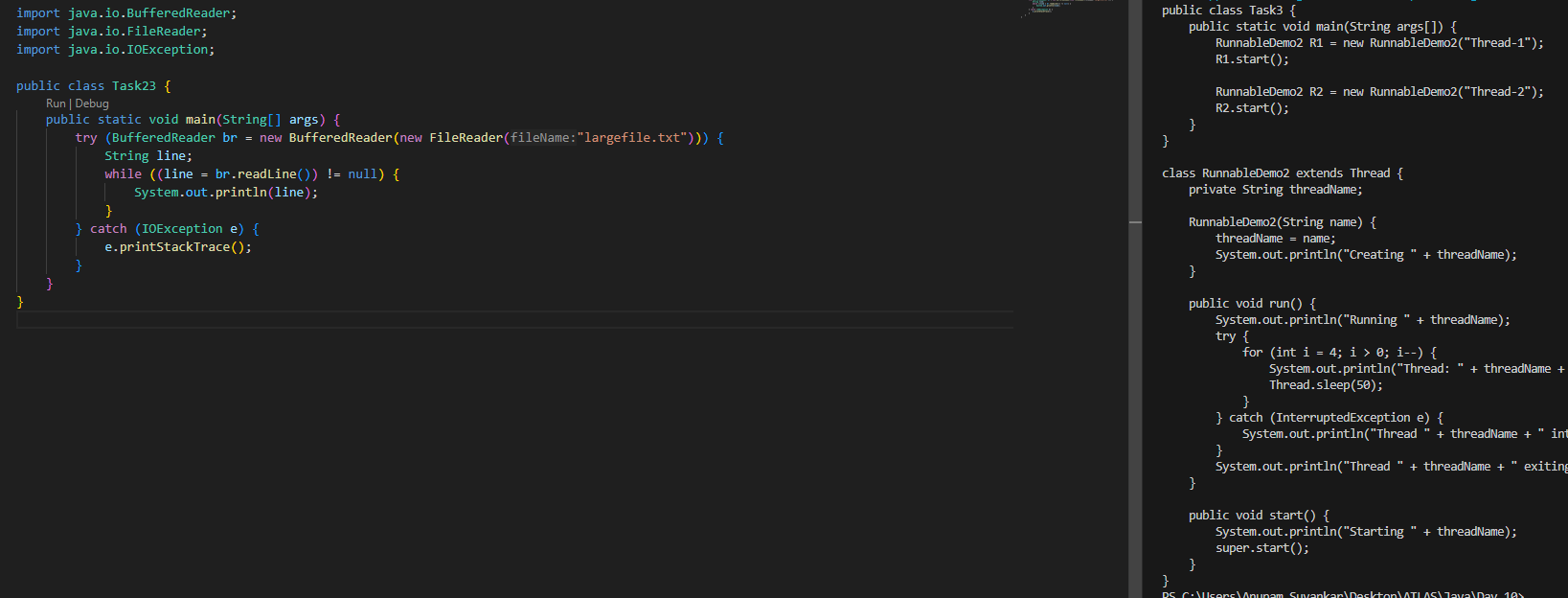
Task 21



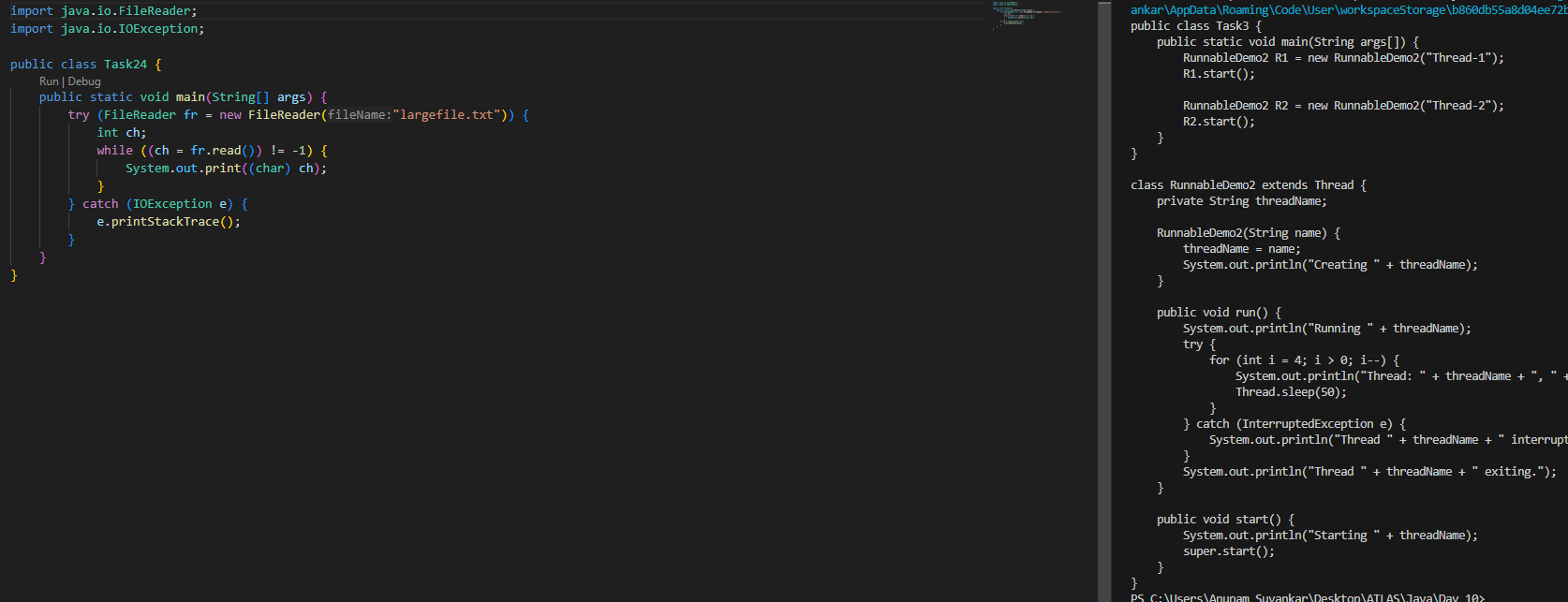
Task 22



Task 23



Task 24



Task 25

