# Build your own Scan Manager

# Stage 2 — Asynchronous Processing

Now that you can route tasks, boost throughput by executing jobs in parallel. The number of worker processes must equal the number of logical CPU cores on the host.

## Your Task

* Extend your Stage 1 solution (or create `process\_tasks\_async.py`) to run jobs concurrently.
* Limit concurrency so that at most `os.cpu\_count()` jobs run simultaneously.
* Append the worker id to each log line.
* Ensure logging remains thread‑/process‑safe; each entry should still be a single line as defined before.

## Deliverables

* `process\_tasks\_async.py` (or modifications to Stage 1 code)
* Updated `tasks.log` showing interleaved completion of tasks.