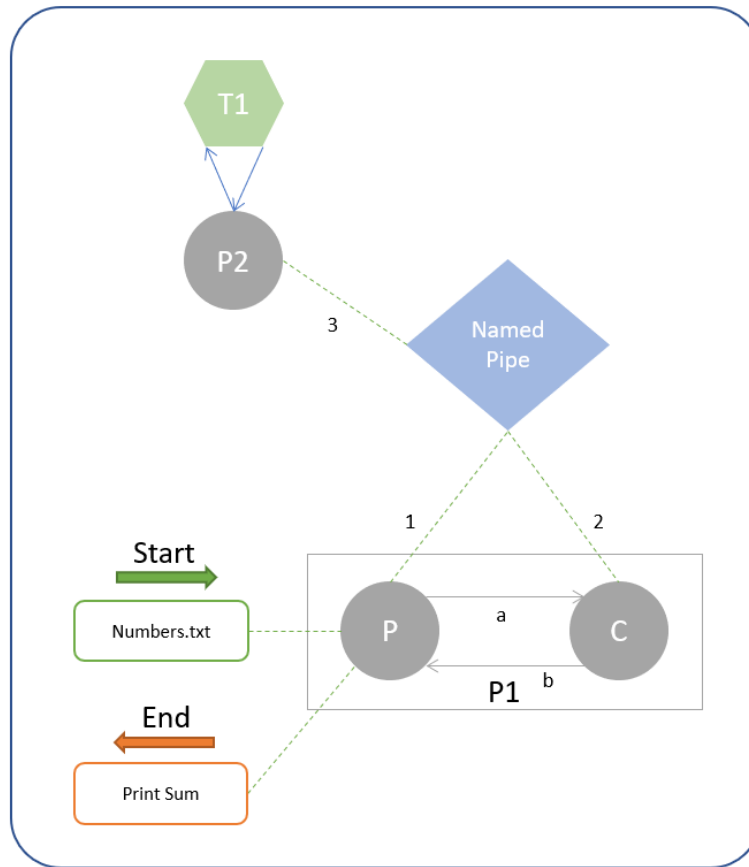


## Umair's Counter



- **P1 program:**
  - Parent receives the name of a file as a command line argument.
  - Parent sends the name to a named pipe [1] and Parent also sends a signal to Child [a] that it has sent contents.
  - Child should only try to read an output from named pipe, if it has received a signal from Parent.
  - After reading the results from named pipe [2], Child sends the results to Parent [b].
  - Parent should display the results.
- **P2 program:**
  - Program reads the filename from named pipe [3]
  - Program initializes threads. (the no. of threads = the no. of rows in the file)
  - Each thread is given a row of the file.
  - Each thread returns the sum of all the numbers in that row.
  - Program adds the results of all the threads to get a total\_sum.
  - Program writes that total\_sum to the named pipe [3], and displays it on the screen before terminating.
- **Execution:**

Type "make run" in terminal. Ignore the warnings and match your results with the provided results.

*Note: make use of wait to achieve synchronization.*