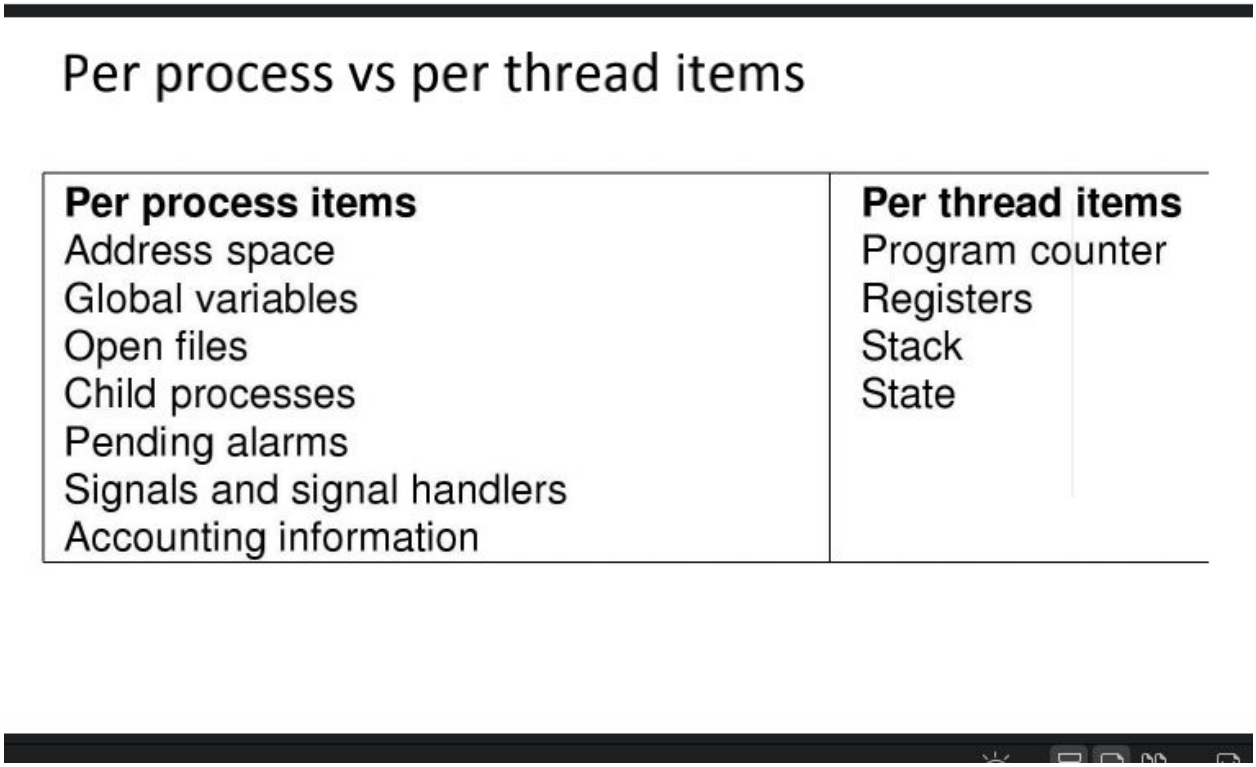
Basic Theory:

In part 1 when we call fork it creates a new similar to parent process. Fork copies all the variables of the parent process(like open files, signal handlers and signal dispositions, current working directory, user and group IDs.) after doing fork child and parent are 2 different processes(their PID also differ).

But incase of pthread_create it creates new thread in the program with the same PID. This new thread and parent also share resources like global variables and thread will share data,open files, signal handlers and signal dispositions, current working directory, user and group IDs.
Refer below image: It show what pthread share and what it has own it's own.



Question Explanation

As in part 1 it’s using a fork so the child and parent process are using 2 different variables so it gives accordingly.

Whereas in part2 pthread_create’s process and parent process use the same global variable so they give result accordingly.