Problem 4.1

PAAPAABBPABBCCPBCCDDCDDD

The P s are interleaved with the outputs of the children. In my code the time slice allows the children process to loop through the outer loop twice before switching processes, thus why the letters are printed in pairs. Process with the same priority are run in the order of their process IDs, since main has priority of 20 and all the children have priority of 20, the processes are run from lowest pid to highest, so main procA,main procA procB, main procA procB procC, etc.

4.2

PAAPAABBPABBCCPDDDDDBCCC

The output differ once the 4th process, the one with priority 50 is called. Because of its higher priority, it is run before procB, procC and main. Once completed procB and procC resume normal behavior.

4.3

PAAPAABBPCCCCCABBPDDDDDB

The output differs in the same way as 4.2 differs from 4.1, the outputs are the same until the processes with higher priority are called, and once called the gain priority of the CPU and run until completion before the other processes are resumed.