

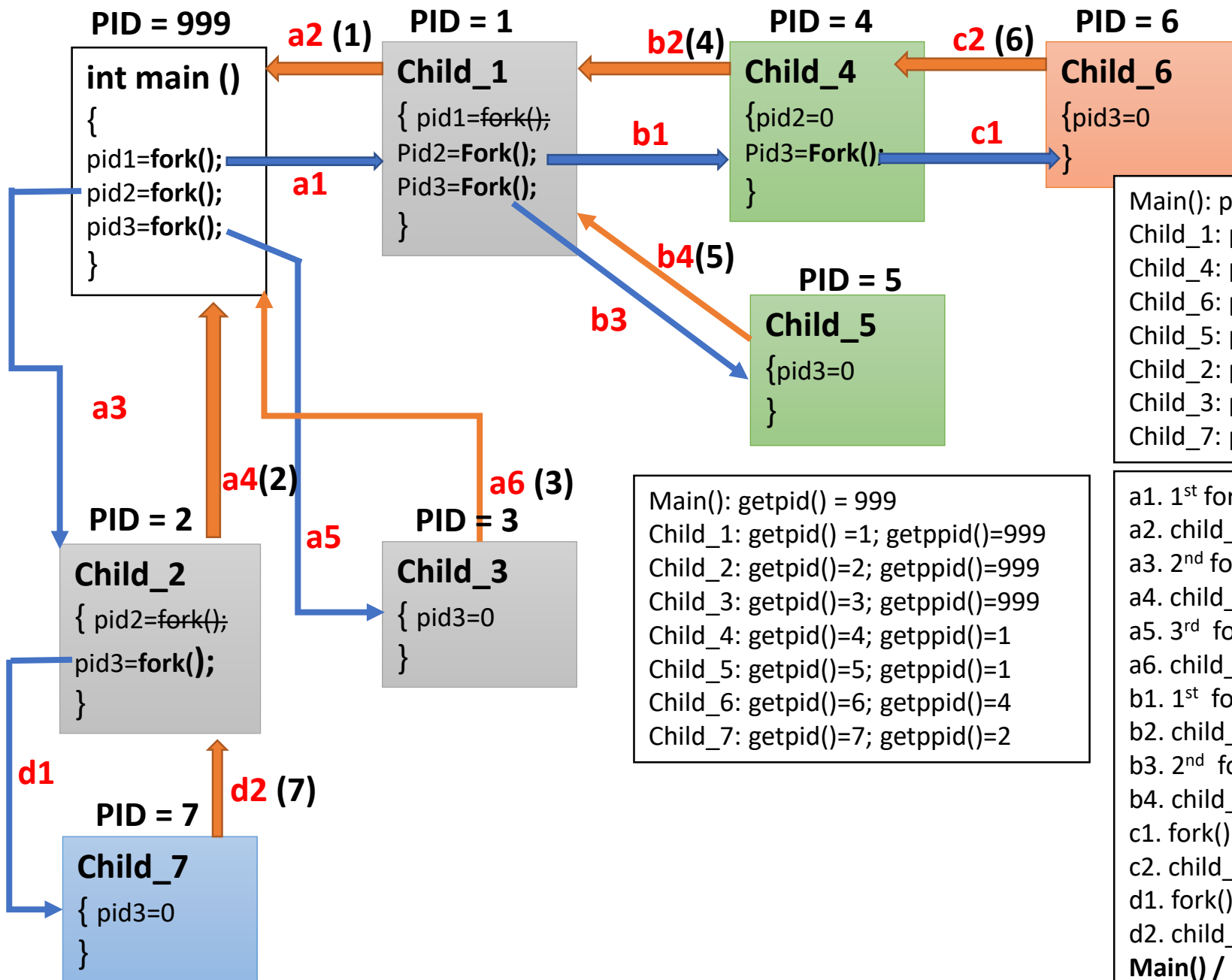


# Multiple fork() call example

 Child created  
 Returns PID to parent



Main(): pid1 = 1; pid2=2; pid3=3  
 Child\_1: pid1=0; pid2 = 4; pid3=5  
 Child\_4: pid2=0; pid3 = 6  
 Child\_6: pid3=0  
 Child\_5: pid3=0  
 Child\_2: pid2=0, pid3 = 7  
 Child\_3: pid3=0  
 Child\_7: pid3=0

Main(): getpid() = 999  
 Child\_1: getpid() =1; getppid()=999  
 Child\_2: getpid()=2; getppid()=999  
 Child\_3: getpid()=3; getppid()=999  
 Child\_4: getpid()=4; getppid()=1  
 Child\_5: getpid()=5; getppid()=1  
 Child\_6: getpid()=6; getppid()=4  
 Child\_7: getpid()=7; getppid()=2

a1. 1<sup>st</sup> fork() called from parent and child\_1 is created  
 a2. child\_1 returns its PID (1) to its parent (main)  
 a3. 2<sup>nd</sup> fork() called from parent and child\_2 is created  
 a4. child\_2 returns its PID (2) to its parent (main)  
 a5. 3<sup>rd</sup> fork() called from parent and child\_3 is created  
 a6. child\_3 returns its PID (3) to its parent (main)  
 b1. 1<sup>st</sup> fork() called from child\_1 and child\_4 is created  
 b2. child\_4 returns its PID (4) to its parent (child\_1)  
 b3. 2<sup>nd</sup> fork() called from child\_1 and child\_5 is created  
 b4. child\_5 returns its PID (5) to its parent (child\_1)  
 c1. fork() called from child\_4 and child\_6 is created  
 c2. child\_6 returns its PID (6) to its parent (child\_4)  
 d1. fork() called from child\_2 and child\_7 is created  
 d2. child\_7 returns its PID (7) to its parent (child\_2)  
**Main() / parent process has created a total of 7 child processes**