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COSC 430

4-Story Building Assignment

Code:

#include <stdio.h>

#include <stdlib.h>

#include <unistd.h>

#include <sys/wait.h>

int main()

{

int numIterations = 4; // Number of iterations to repeat program2 and program3

pid\_t pid1 = fork();

if (pid1 == 0)

{

execl("/home/ubuntu/file4/week9/program1", "program1", NULL);

}

else if (pid1 > 0)

{

waitpid(pid1, NULL, 0);

for (int i = 0; i < numIterations; i++)

{

pid\_t pid2 = fork();

if (pid2 == 0)

{

execl("/home/ubuntu/file4/week9/program2", "program2", NULL);

}

else if (pid2 > 0)

{

waitpid(pid2, NULL, 0);

pid\_t pid3 = fork();

if (pid3 == 0)

{

execl("/home/ubuntu/file4/week9/program3", "program3", NULL);

}

else if (pid3 > 0)

{

waitpid(pid3, NULL, 0);

}

else

{

perror("fork");

exit(1);

}

}

else

{

perror("fork");

exit(1);

}

}

}

else

{

perror("fork");

exit(1);

}

return 0;

}

