COSC 350 System Software (Mini Test #3)

03/22/20

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. (7 pt.)Write a syntax free compliable C program.

* A parent process creates a child process. The child create a child. Three processes are running concurrently.
* The child process print “I am your child” 100 times and terminate.
* The grandchild process run forever by printing “I am your grandchild”
* Parent process run forever by printing “ I am your parent”.
* Each process sleep one second after each print.
* Parent process is waiting for the child’s termination. When the child is terminated, the parent print “I finish my job” and terminate itself.
* The grandchild process terminate when the child process terminate. The grandchild process must find out it’s parent termination somehow.
* Must not create zombie or orphan process.

1. (3 pt.) Write a syntax error free compliable C program which accept an positive integer n as an argument and generates a string of the length specified by n and fills it with random alphabetic characters and display the string on stdout. (use rand()%26 +’a’ to create random alphabetic character ASCII code)