CS5243 Advanced UNIX Programming

Assignment 6 (5 pts)

Due: Oct 14, 2023, at 23:59:59

**Notice**

1. Please name your file properly; 2 pts will be taken out for incorrectly-named files.
2. Late submission is not allowed. You will receive 0 point in that case.
3. Plagiarism is not allowed. We will pass your source codes through a tool called “moss”, which is an anti-plagiarism service provided by Stanford University to determine the similarity of programs. If your program has > 20% similarity with your classmates, you will receive 0 point; no exception will be made. (Hint: Please do not share your code with fellow students. Discuss with them instead.)

**What to hand in**

1. Your implementation code. You should name it “**assignment6.c**”.
2. A makefile that can compile your code. You should name it “**Makefile**”.
3. A report that contains explanations of how you implemented your code. You should name it “***Group\_id*.pdf**”.
4. Please upload all the code files separately and the pdf (do not zip them) to eeclass.

**Specifications**

In this assignment, you will learn about the **zombie process.**

Write a program that creates a **zombie** **process**, and justify that the process is a zombie using **ps(1)** command. In your implementation, **the ps(1) command should be implemented in your .c file**.Do not use it outside of your file. The following is the grading policy:

1. **(2 pt)** Write a program that creates a zombie process.
2. **(2 pt)** Verifies that the process is a zombie in your code using **ps(1) command**.
3. **(1 pt)** Describe your implementation in your report.

**Additional Notes**

1. All of your code should be implemented within one .c file.