



<b>Academic Year</b>	<b>2025</b>
<b>Semester</b>	<input type="checkbox"/> Fall <input checked="" type="checkbox"/> Winter <input type="checkbox"/> Summer
<b>Course Code - Name</b>	CSCI 3310 – System Programming
<b>Instructor</b>	Dr. Ghadeer Abdelkader
<b>Assessment</b>	Lab 1
<b>Deadline</b>	Submit during the lab

## Lab 1

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The main purpose of this lab is to test your knowledge of Kernel Modules.

### Instructions:

- You are required to submit this word document converted into PDF on canvas.
- Students having exactly similar code will get a straight 0.
- You are required to complete these questions using any Linux Distro.
- The deadline for submission of this lab is during the lab session. If for some reason, you are not able to complete this lab in the lab session, please inform the TAs.

## Question

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In this lab you are required to perform the followings tasks:

1. Write a Kernel Module that displays a message “Welcome to System Programming” on the load of a kernel module into the Kernel. Just log the messages. DO NOT show message onto the Kernel Console.
2. Write a Kernel Module that displays a message “Cleaning up the Kernel Module” on the exit of a kernel module from the Kernel. Just log the messages. DO NOT show message onto the Kernel Console.
3. Create a Makefile for compiling the above module.
4. Make sure to add the following details to your Kernel:
  - a. Author details (<Student Name>:<Student ID>)
  - b. Description (<Student ID>: This is <Student Name’s> first Kernel module)
5. Insert this Kernel module into the Kernel.
6. Verify the insertion by checking the system log.
7. Remove this Kernel module from the Kernel.
8. Verify the deletion by checking the system log.
9. VERY IMPORTANT: Provide screenshot of each step (Step 5-8).
10. VERY IMPORTANT: Provide C code along with makefile code in this word document.

**P.S.: For insertion and deletion messages, just create one C file with 2 separate methods.**