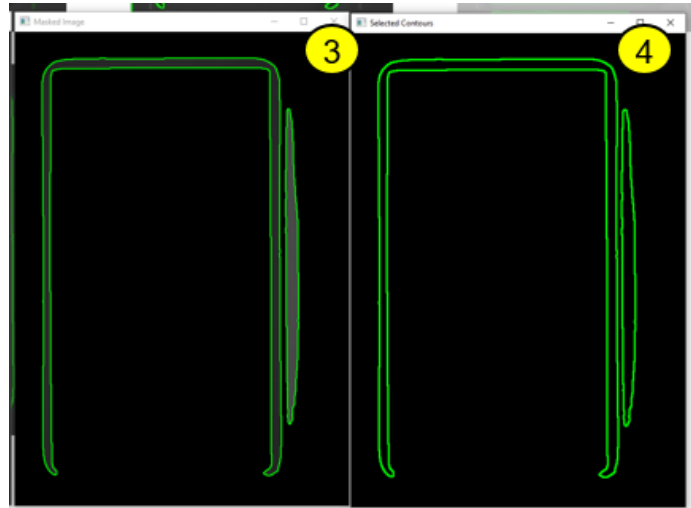# SECTION C
Weekly Journal

Instruction to Student:
1. On a daily basis, record the specific task that you carried out for that day.
2. At the end of every week, describe one task in more details with diagrams or photos attached.

Week : 7   Date from: 22/4/24   to   26/4/24

Department/Section Attached: Assembly Metrology

Day	Tasks Record
Monday	- Conducted Trial and Error to find out the exact settings for each die. - Used two threshold values to accurately find the edges of bleedings. - Coded additional methods to prepare the image beforehand to ensure more accurate results. - Edge detection seems limited due to lack of user inputs to adjust threshold to different images.
Tuesday	- Adjusted the code to the streamlit dashboard. - Currently only metrics values are returned, some visualization could be useful. - Added sliders to allow user to adjust threshold values accordingly.
Wednesday	- UBFL Analysis code works well without errors, but values returned are inaccurate. - Thresholds are unable to be universal or classified to each die, instead each image has unique threshold which must be manually inputted by user.
Thursday	- Restarted the entire code on Jupyter Notebook, the concept and method need to be reworked. - Created an image overlay code to create a single image to represent the entire lot. - New code allows for user to enter threshold values in terminal and select the exact area of bleeding, ensuring higher accuracy. - Area and Percentage calculated accurately. - Visual representation of bleeding shown - High user involvement still required.
Friday	- Integrated new code into the Streamlit Dashboard. - Able to create and display images with user inputs. - Pop-up window for user selection of UBFL areas. - Metrics provided, Area and Percentage. - Images can be downloaded as zip. - Need to improve UI/UX

Describe one task in more details with diagrams or photos attached.
Explain the importance/relevance of this task to the company.

User adjusted threshold will display the detected edges using a green border, after adding the two threshold edge detection, a combined detected edge image will be displayed, here the user can select the areas which represent bleeding on the substrate.

The selected area can also be unselected by clicking the wrongly selected contours, after verification by the user, user can exit the window and the code will display the bleeding area and calculate the exact area of the bleed based off the die area.
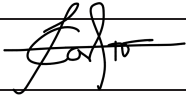
By using the streamlit dashboard, the code can be uploaded onto a server for use by anyone in the company. With thorough analysis of bleeding on the substrate and die, engineers can figure out potential causes of failure and adjust the machinery accordingly before they fails, reducing down time, increasing productivity and output, reducing man hours and repair cost.

Assessment on Student
Grading Scheme :

A (Excellent)	-	Consistently exhibit qualities beyond expectation and norms.
B+ (Very Good)	-	Exhibit qualities above expectation and the norms.
B (Good)	-	Exhibit qualities which are considered necessary to produce good quality work.
C+ (Good Credit)	-	Exhibit good qualities which are the norm.
C (Credit)	-	Exhibit acceptable qualities which are the norm.
D (Pass)	-	Exhibit qualities which varies between the norm and unacceptable standard.
F (Fail)	-	Exhibit qualities which are not acceptable and are hindrances to operations.

Conduct:	Average	Attendance: Average	* Regular / Average / Poor
Performance :	Satisfactory	Punctuality: Satisfactory	* Satisfactory / Unsatisfactory
Remarks :			

Name of Supervisor :	Francis Castro Click here to enter text.	Signature :	
*Delete whichever is not applicable		Date :	