Activity No. <n> <title>&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Course Code: CPE 201L&lt;/td&gt;&lt;td&gt;Program: BSCpE&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Course Title: Data Structure and Algorithm&lt;/td&gt;&lt;td&gt;Date Performed: August 30, 2025&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Section: 2 - A&lt;/td&gt;&lt;td&gt;Date Submitted: August 30, 2025&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Name: Villacin, Justine R.&lt;/td&gt;&lt;td&gt;Instructor: Ma'am Maria Rizette H. Sayo&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title></n>								
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# 1.Objectives

- Demonstrate the use of a queue structure in Python.
- Show how to traverse and reverse the order of elements in a queue.

### 2. Discussion

 A queue is a data structure that follows the First In, First Out (FIFO) principle. The provided program enqueues (appends) data to a queue and allows for traversing the queue in both original and reversed order.

# 3. Materials and Equipment

- Google Colab (IDE)
- Queue class to implement enqueue, display, and reverse operations.

#### 4. Procedure

- Define a Queue class with methods: enqueue to add/append items, display to show items, and reverse to reverse the queue.
- Instantiate a queue object and enqueue the names in order.
- Call the display method to show names in the original order and the reverse method to show names in reversed order.

### 5. Output

- Full Name Transverse: JUSTINE RIVERA VILLACIN
- Full Name Reverse: VILLACIN JUSTINE RIVERA



# 7. Conclusion

The program successfully demonstrates how to use a queue to store and manipulate data. The
queue's functionality is evident through the display and reverse methods.

Criteria						Ratings						
© SO 7 PI 1  Student Outcome 7.1  Acquire and apply new knowledge from outside sources.  threshold: 4.8 pts	6 pts Excellent   Educational interests and pursuits exist and flourish outside classroom requirements,knowledge and/or experiences are pursued independently and applies knowledge learned into practice		5 pts Good   Educational interests and pursuits exist and flourish outside classroom requirements,knowledge and/or experiences are pursued independently		4 pts Satisfactory   Look beyond classroom requirements, showing interest in pursuing knowledge independently		3 pts Unsatisfactory   Begins to   look beyond classroom requirements, showing interest in pursuing knowledge independently		2 pts Poor   Relies on classroom instruction only		1 pts Very Poor   No initiative or interest in acquiring new knowledge	6 pts
Student Outcome 7.2 Learn independently threshold: 4.8 pts	6 pts Excellent   Completes an assigned task independently and practices continuous improvement	Completes an assigned task without guidance supervision or completes an Require minimal guidance supervision or completes and supervision or complete su		4 pts Satisfactory   Requires minimal guidance to complete an assigned task	3 pts Unsatisfactory   Requires detailed or step-by-step instructions to complete a task		iled p	2 pts Poor   Shows little interest to complete a task independently		1 pts Very Poor   No interest to complete a task independently		6 pts
SO 7 PI 3  Student Outcome 7.3 Critical thinking in the broadest context of technological change threshold: 4.8 pts	6 pts Excellent   Synthesizes and integrates information from a variety of sources; formulates a clear and precise perspective; draws appropriate conclusions	5 pts Good   Evaluate information from a variety of sources; formulates a clear and precise perspective.		4 pts Satisfactory   Analyze information from a variety sources; formulates a clear and precise perspective.		3 pts Unsatisfactory   Apply the gathered information to formulate the problem		2 pts Poor   Gather and summarized the information from a variety of sources but failed to formulate the problem		V G ir fr	pts fery Poor   sather iformation rom a variety if sources	6 pts
Student Outcome 7.4 Creativity and adaptability to new and emerging technologies threshold: 4.8 pts	6 pts Excellent   Ideas are combined in original and creative ways in line with the new and emerging technology trends to solve a problem or address an issue.	cellent   Ideas are mbined in original d creative ways in e with the new knowledge to demerging chnology trends to ve a problem or down a manufacture of the control of the		Ideas are creative in solving a		3 pts Unsatisfactory Shows some creative ways to solve the proble		initiative and to attempt to		le c n	pts //ery Poor   deas are opied or estated from he sources onsulted	6 pts