Department of Computer Science and Engineering
Academic Year 2024 – 2025 (Odd Semester)
Degree, Semester & Branch: II Semester B.E. CSE-B

Course Code & Title: CS3251 & Programming in C
Name of the Faculty member (s): Mrs.P.Devisri
Innovative Practice Description

Unit / Topic: Unit II / String Operations

Course Outcome: CO 2

Topic Learning Outcome: TLO 6

Activity Chosen: Reflection

Justification:

- The reflection activity is crucial for the topic "String Operations" as it ensures deeper comprehension and active engagement. By expressing their understanding orally what they understood, students reinforcing their learning and identifying gaps in their knowledge. This method promotes self-assessment, helping students recognize areas of confusion and encouraging curiosity.
- **Time Allotted for the Activity:** 15 minutes

Details of the Implementation:

- The instructor explained the concept of **string operations** in a 35-minute session, covering tasks such as concatenation, string length calculation, conversion, reversed string, string copy, string to lowercase and upper case.
- The instructor asked the students to answer the following C programming tasks:
  1. If the first name, last name, and middle name are given as input, display them as the full name.
  2. Display the number of characters in the full name.
  3. Convert the first name into uppercase letters and the last name into lowercase letters
  4. Reverses the full name.
- Students were encouraged to verbalize what they understood about the topic and share any doubts or queries they had.
- T. Abinaya (Fig. 1) explained the use of strcat() for full name, strlen() for counting characters.
- Sivadharshini (Fig. 2) mentioned strupr() and strlwr() for case changes, and strrev() for reversing.
- The instructor reviewed the student's verbal responses to assess their level of understanding.
- The activity helped reinforce the concept, encouraged active participation, and improved understanding through personalized feedback.

- **CO – PO / PSO mapping:**

CO	PO1	PO2	PO3	PO4	PO9	PO10	PSO1
CO 3	2	2	2	1	1	1	1

(1 – Low 2 – Moderate 3 – High)

PO / PSO mapped:

Innovative practice	PO1	PO2	PO3	PO4	PO9
	2	2	2	1	1
Justification for correlation	The students applied engineering principles to understand and solve problems related to string operations.	Students identified challenges in manipulating strings and provided efficient solutions using string operations.	Students solved problems by using modular programming concepts and implemented string operations effectively.	Students selected appropriate string operation concepts to interpret and organize data, providing valid conclusions. .	The students worked individually and in teams to solve problems using string operations..

- **Images / Screenshot of the practice:**

Fig 1: Reflection activity by Abinaya T

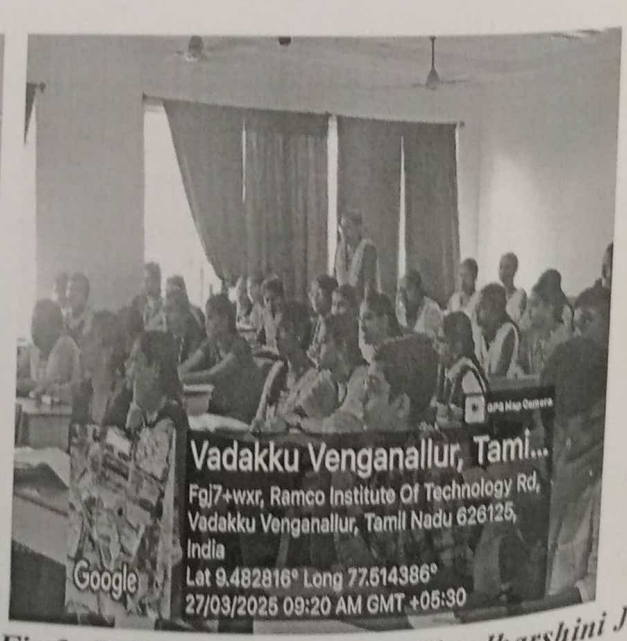

Fig 2: Reflection activity by Sivadharshini J

- **Reflective Critique:**
  - ***Feedback of practice from students and other stakeholders:***
    - Students appreciated the opportunity to express their doubts and clarify them in a non-intimidating way.
    - Students told the teacher that the activity encourages them to pay attention in class and raise their hands when they have questions.
  - ***Benefit of the practice:***
    - The activity assisted the teacher in assessing, improving, and analysing their own learning.
    - A reflection activity allowed the teacher to evaluate the students' level of understanding and to plan the next session accordingly.
  - ***Challenges faced in implementation:***
    - The majority of the students actively participated, with a few exceptions. Motivated the students who are not actively participating in the activity by highlighting the benefits of reflection and creative thinking.

References:

1. https://www.clemson.edu/otei/documents/Reflection%20Activities%20r.pdf
2. https://www.ritrjpm.ac.in/images/computer-science/Reflection-HCI-MSS.pdf
3. https://www.ritrjpm.ac.in/images/computer-science/SM-UII-AI-CS8691.pdf
4. https://teaching.utk.edu/wp-content/uploads/sites/78/2018/04/ReflectionActivities.pdf
5. https://sites.google.com/site/reflection4learning/why-reflect