Department of Computer Science and Engineering
Academic Year 2022 – 2023 (Even Semester)

Degree, Semester & Branch: II Semester B.E. CSE 'A'
Course Code & Title: CS3251 Programming in C
Name of the Faculty member (s): Mrs.B.Vijayalakshmi, AP (SG)/CSE

Innovative Practice Description

- **Unit / Topic: Unit II / String operations**
- **Course Outcome:** CO2
- **Topic Learning Outcome: TLO6**
- **Activity Chosen: Collaborative learning**
- **Justification:**
  Collaborative learning activities require students to actively engage with the material by discussing concepts, solving problems, and sharing insights with their peers. This approach fosters deeper understanding and retention of string operations in C programming compared to passive learning methods.
- **Time Allotted for the Activity: 30 Minutes**
- **Details of the Implementation:**
  - Collaborative learning is an approach for learning where students work in groups to solve the given questions.
  - Instructor gave an overview of the available string functions in C.
  - After that the instructor asked the students to form their own group of size 4 students in a team.
  - Introduce the task - For each group different string functions were assigned and they are asked to explore about the functions with coding examples. After that they are asked to have a discussion about the given topic with their teammates which is shown in Fig.1.
  - The students were assigned with a time limit of 10 minutes to engage with the task. The faculty member walks around and addresses any questions as needed.
  - Debrief. After the discussion few students from each teams were called to provide a summary of their conclusions. The faculty member addressed the misconceptions and clarified the confusing points.

- **CO – PO / PSO mapping:**

CO	PO1	PO2	PO3	PO5	PO8	PO9	PO10	PO12	PSO1	PSO2	PSO3
CO2	3	2	2	2	1	1	1	1	3	2	3

(1 – Low 2 – Moderate 3 – High)

- **PO / PSO mapped:**

Innovative practice	**PO1**	**PO2**	**PO3**	**PO9**	**PO10**	**PSO1**	**PSO2**	**PSO3**
	3	**2**	**2**	**1**	**1**	**3**	**1**	**1**
Justification for correlation	The students have the basic knowledge about strings.	The students analyze the given questions and apply the various string functions.	The students find ways to solve the given problems.	The students coordinate and demonstrate the activity as a team.	The students communicate the solution to others.	The concept is used in developing the software	The concept is used in security applications	The concept is used in solving problems in AI

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

Fig 1: Peer Discussion

- **Reflective Critique:**
  - ***Feedback of practice from students and other stakeholders:***
    - Everyone from the team contributed their ideas, and they were able to come up with creative solutions as a team.
  - ***Benefit of the practice:*** (E.g.: Outcome attainment would have increased due to innovative practice over conventional practice)
    - The activity provides students with opportunities to interact with their peers, exchange ideas, and learn from each other's perspectives.
    - By sharing their thoughts, the students can develop communication skills vital for expressing technical concepts, and working in team environments.
  - ***Challenges faced in implementation:***
    - It is difficult to provide time to all the teams to discuss their views.
    - Some of the students from the team are hesitant to share their ideas in front of the class.

References:

- https://teaching.cornell.edu/teaching-resources/active-collaborative-learning/collaborative-learning
- https://www.ritrjpm.ac.in/images/computer-science/2022-2023/Unit_2_collaborative%20learn.pdf

Signature of Faculty Member **HOD**