



# RAMCO INSTITUTE OF TECHNOLOGY

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## Department of Computer Science and Engineering

Academic Year 2022 – 2023 (Odd Semester)

**Degree, Semester & Branch** : V Semester B.E ECE 'B'  
**Course Code & Title** : CS8392 & Object Oriented Programming  
**Name of the Faculty member** : Dr. K.Vivekrabinson, AP / CSE

### Innovative Practice Description

- **Unit / Topic:** Unit I / Arrays
- **Course Outcome:** CO1
- **Topic Learning Outcome:** TLO 1
- **Activity Chosen:** Collaborative Learning
- **Justification:**

Arrays are used when there is a need to use many variables of the same type. It can be defined as a sequence of objects which are of the same data type. It is used to store a collection of data, and it is more useful to think of an array as a collection of variables of the same type. Arrays can be used for sorting data elements, performing matrix operations, CPU scheduling, and also used to implement other data structures like Stacks, Queues, Heaps, Hash tables etc. The prime objective of Collaborative Learning is to promote both self and peer teaching which requires students to understand the concept very clearly and engage in discussion and learning.

- **Time Allotted for the Activity:** 40 Minutes

- **Details of the Implementation:**

The course instructor initially chose six student volunteers depending on their class involvement, interest and subject knowledge. The leaders are allowed to make group on their own. A particular topic has been assigned to the volunteers one week before the activity. On the day of activity, the students are seated with their group members and an individual problem statement has been given to each team leader. The leaders have solved the problem with their own and discuss with their team members about the solution. The team members also actively involved in the discussion and clarify their doubts with their leader. Finally, the instructor consolidated the information that was discussed in this activity for another 10 minutes.

- **CO – PO / PSO mapping specific to this event:**

CO	PO1	PO2	PSO1
CO1	3	3	2

(1 – Low    2 – Moderate    3 – High)

- **PO / PSO mapped:**

Innovative practice	PO1	PO2	PSO1
	3	3	2
<b>Justification for correlation</b>	Apply the knowledge of Arrays to solve problems	Student will work individually and as a Team	The basic understanding of an array will help the students to implement a sorting and searching like algorithms

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



- **Reflective Critique:**

- ❖ ***Feedback of practice from students and other stakeholders:***

- Students felt the activity is very interesting. Students felt the activity conducted gave them a chance to improve their communication skills, also working as a team they can face group discussions in future work place. Through learning from peer members, students felt comfortable to clarify their doubts.

- ❖ ***Benefit of the practice:***

- Through this activity the students made to work as a team and explain to others also, like a group discussion activity. The students are made to understand the different the applications through knowledge sharing.

- ❖ ***Challenges faced in implementation:***

- Some students in the team did not participate actively in the team.
- Some student was not able to understand the multidimensional array concept. So the students felt very difficult in this activity.

**References:**

- ❖ <https://teaching.cornell.edu/teaching-resources/engaging-students/collaborative-learning>
- ❖ [https://www.ritrjpm.ac.in/images/computer-science/26\\_OIT551\\_Colloborativecoding.pdf](https://www.ritrjpm.ac.in/images/computer-science/26_OIT551_Colloborativecoding.pdf)
- ❖ [https://www.ritrjpm.ac.in/images/computer-science/2021-2022/KVS\\_CS8492\\_JIGSAW.pdf](https://www.ritrjpm.ac.in/images/computer-science/2021-2022/KVS_CS8492_JIGSAW.pdf)

**Signature of Faculty Member**

**HOD**