



RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Computer Science and Engineering
Academic Year 2024 – 2025 (Even 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 I / Looping statements

Course Outcome: CO 1

Topic Learning Outcome: TLO 3

Activity Chosen: Mind Map

Justification:

- Mind maps provide a visual representation of looping statements, helping students better understand their structure, syntax, and functionality. By visually organizing information, students can see how loops work and how they are related to other programming concepts. Engaging students in creating mind maps encourages active participation in the learning process. It helps students by making concepts more interesting and motivating them to learn more about a specific topic.
- **Time Allotted for the Activity:** 15 minutes

Detail Implementation of Mind Map:

- Instructor explained the particular concepts/topic in classroom within 30 minutes.
- Based on the discussion and the teacher asked the students to draw a mind map related to the topic within 15 minutes.
- Each student created a mind map on Looping statements.
- Students represent the concept taught in the class by visual representation.
- Instructor collected the sheets from the students.

CO – PO / PSO mapping:

CO	PO1	PO2	PO3	PSO1
CO 1	2	1	1	1

(1 – Low 2 – Moderate 3 – High)

PO / PSO mapped:

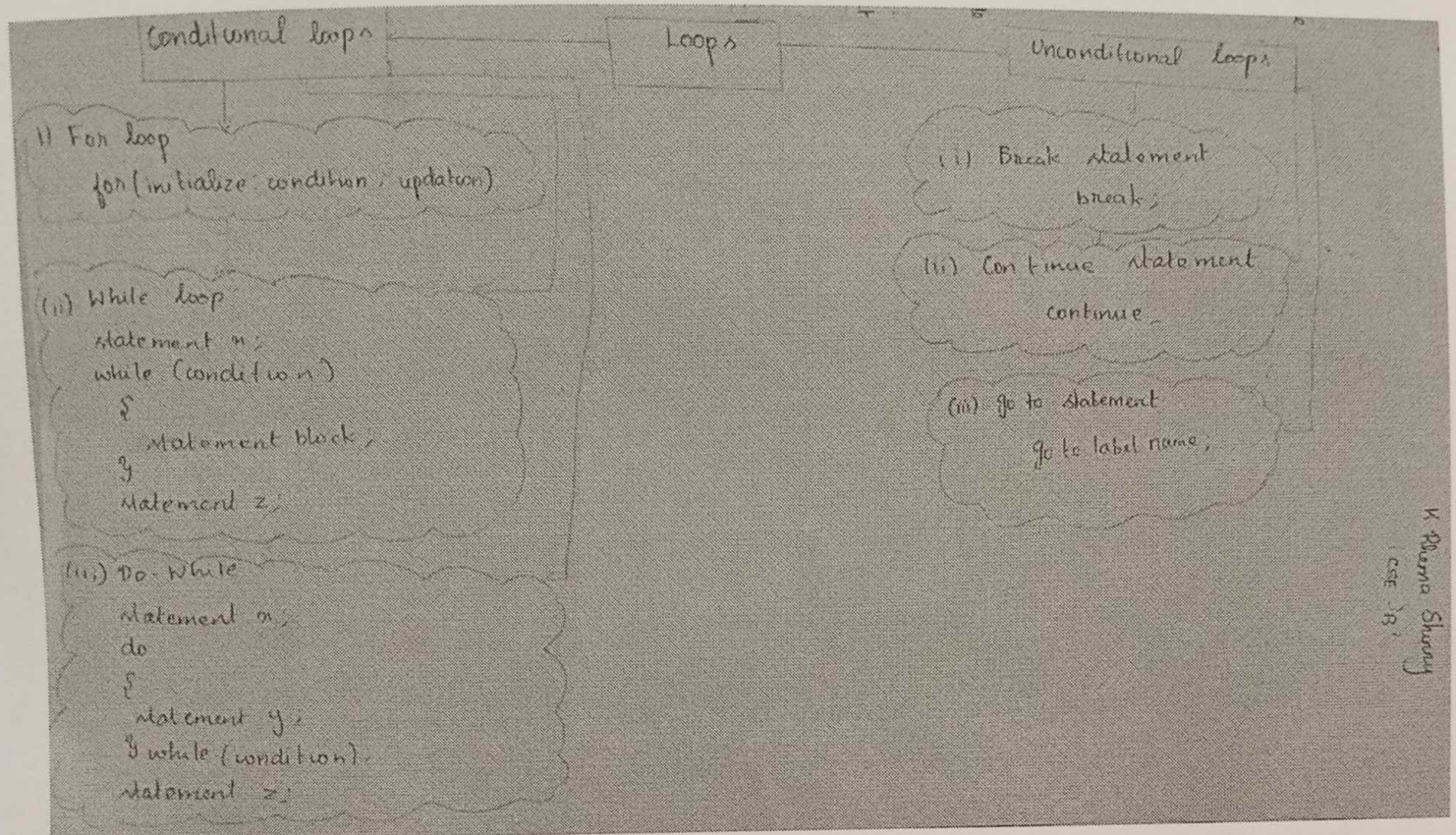
Innovative practice	PO1	PO2	PO3	PSO1
	2	1	1	1
Justification for correlation	Students applied their knowledge of looping to develop a C program to solve various engineering problems.	Students understood the looping concepts and were able to solve simple and complex engineering problems.	Students who grasp looping concepts are able to provide solutions to real-time looping problems.	Students used to develop C programming to control, manage, and test various software.

Images / Screenshot of the practice:

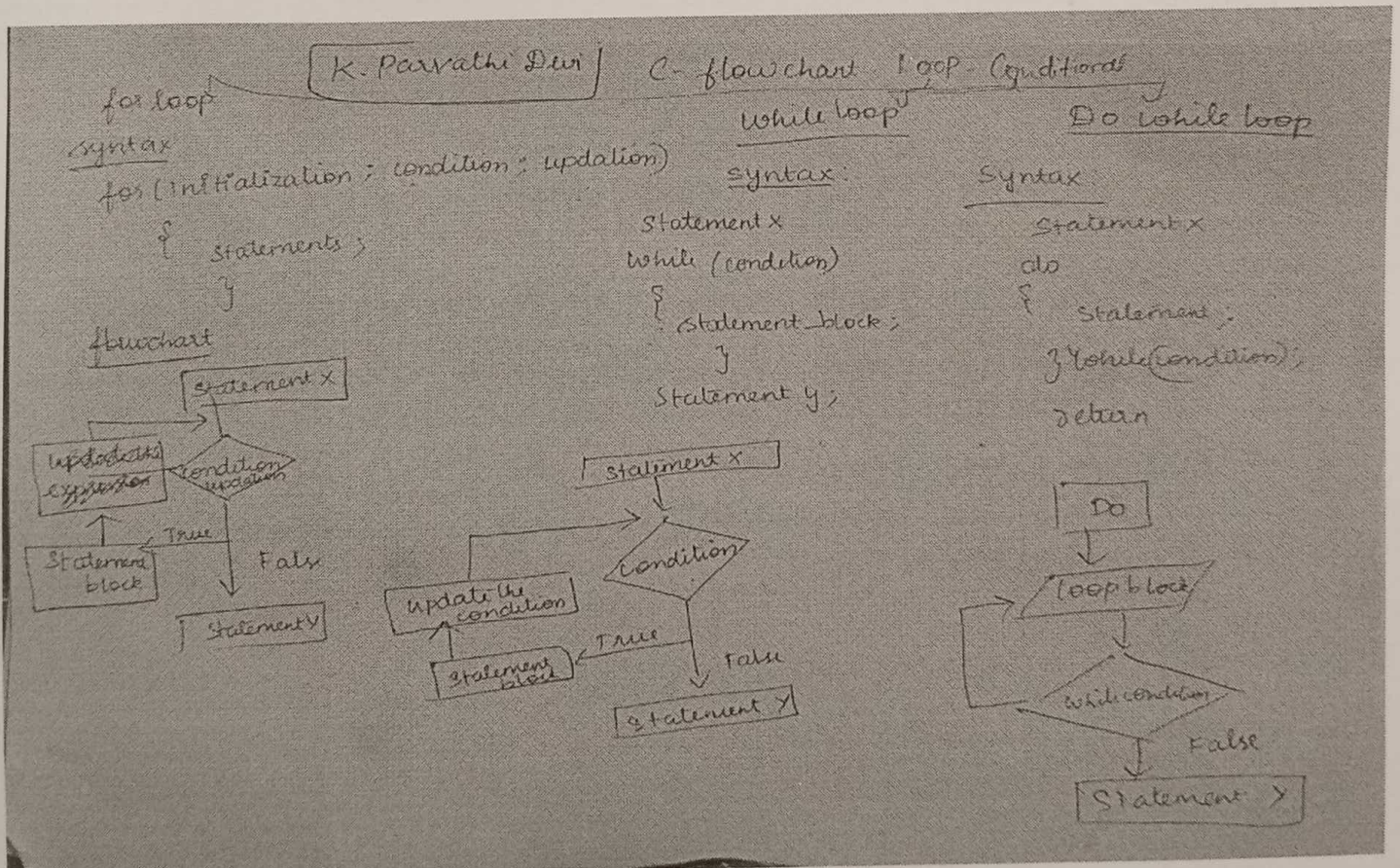


Figure 1: Glimpses of Mind map activity in class room

Glimpses of Mind Map Activity



Mind Map by Rhema Shinny K, I CSE-B

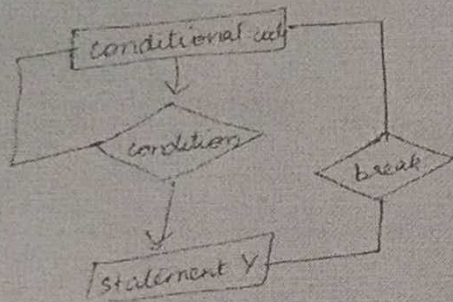


Mind Map by Parvathi Devi K, I CSE-B

Unconditional loops

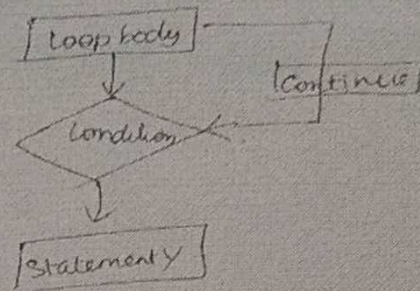
break
syntax

```
for (initialise, update, condition)
    if (condition)
        break;
```



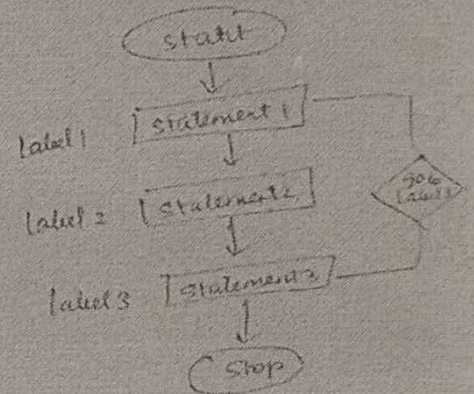
continue

syntax
continue;



go to

```
Statement 1
if (condition)
    goto label;
Statement 2;
Statement 3;
label :
    Statement 4;
```



Mind Map by Parvathi Devi K, I CSE-B

• **Reflective Critique:**

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

- Students expressed a strong grasp of the concept, attributing their understanding to the clear pictorial representations.
- The visual aids facilitated easy recall of the day's lesson and sparked new ideas among students regarding the topic.

❖ **Benefit of the practice:**

- From this activity, the students can get more clarity in the particular topic.
- Through this activity, the students are able to remember and describe the various conditional and unconditional looping statements.

❖ **Challenges faced in implementation:**

- Some of the students feel difficult to depict the concepts pictorially and also need extra time.

References:

1. <https://www.ritrjpm.ac.in/images/computer-science/Mind%20Map.pdf>
2. https://www.ritrjpm.ac.in/images/computer-science/43.CS6703_MindMap.pdf
3. https://www.ritrjpm.ac.in/images/computer-science/5_CS8591_Mindmap.pdf
4. https://www.ritrjpm.ac.in/images/computer-science/20212022/BV_Mindmap.pdf
5. <https://www.lucidchart.com/pages/how-to-make-a-mind-map>