FLIPPED CLASSROOM ACTIVITY REPORT

Topic: Lexical Analysis and Parsing

Department of Computer Science and Engineering

FLIPPED CLASSROOM ACTIVITY REPORT

Topic: Lexical Analysis and Parsing
Date: 27/03/2025
Venue: Room No. 410
Instructor: Mr. Vipin Rawat
Total Teams: 4
Total Participants: 14

Objective of the Activity:

To enhance students' conceptual understanding and problem-solving skills related to **Lexical Analysis and Parsing** by using a student-centric flipped classroom model.

Description of Activity:

Prior to the session, students were assigned learning materials including video lectures and reading resources on Lexical Analysis and Parsing. On the activity day, students collaborated in teams to discuss problems, share insights, and present their understanding through practical examples and discussions. The instructor facilitated and guided the discussion while allowing students to take the lead in exploring and teaching each other.

Participants List:

1. Akhilesh Kumar Yadav
2. Guddu Kumar Manjhi
3. Faisal Khan
4. Deepak Kumar Ram
5. Deepak Kumar Pandit
6. Ashish Soni
7. Dhiraj Kumar
8. Abdul Quauee
9. Abhishek Kumar Singh
10. Ankit Kumar Singh
11. Aditya Anand
12. Gaurav Kumar
13. Aditya Kumar
14. Divyanshu Kumar

Team - 01

(I) Akhilesh kumar yadav 2203631000
(II) Guddu kumar manjhi
(III) Faisal khan
(IV) Deepak kumar Ram
(V)
VI

provide a sample code / problem

promblem-

Total = count + Rate * 10

Team - 2

(I) Deepak kumar pandit

(II) Abishek soni

(III) Dhiraj kumar

(IV) Adbul quaweee

Token generation

→ The identifier (id1) total

→ The Assignment symbol (=)

→ The identifier (id2) (our

→ The plus sign (+,

→ The identifai (id2,

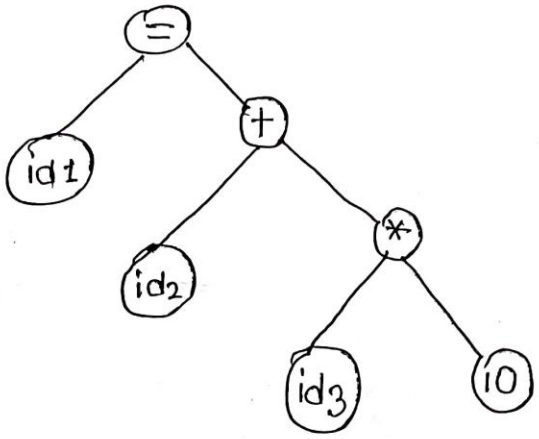
The multiplication (*,

The constant number (10,

Team - 3 (parse Tree Generation)

1. Abhishek kr. singh (2203630100006)
2. Ankit kr. singh (2203630100029)
3. Aditya Anand. (2203630100011).

$$id_1 = id_2 + id_3 * 10$$



Pharse Tree.

Task: Intermediate code generator

Team 4:

Gaurab kumar (22036301000066)
Aditya kumar (22036 30100012)
Divyanshu gaurav (22036301000063)

Total ~~[illegible]~~ count + rate x 10

id1 = id2 + id3 * 10

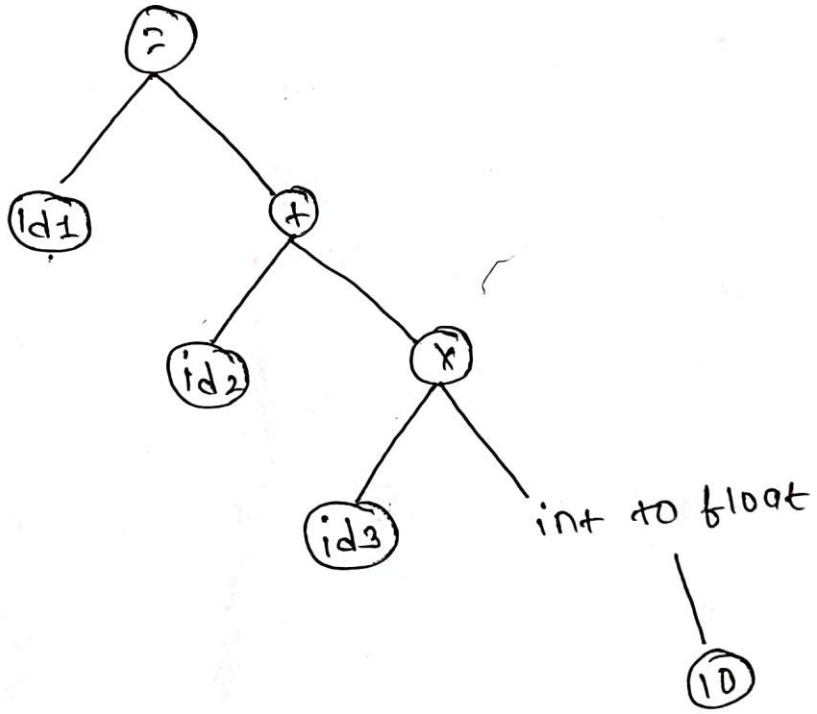


Fig: Semantic phase:

Attendance Sheet

AMBALIKA INSTITUTE OF MANAGEMENT & TECHNOLOGY, LUCKNOW

Flipped Classroom

Attendance Sheet

Course Name:	Compiler Design	Date:	27/3/25
Branch:	CSE	Year:	3rd
Section:	A	Instructor Name:	VIPIN KAUSHIK
Topic Name:	~~Optimizing Code~~ Lexical Analysis and parsing		

Sr. No	Roll No.	Name of Student	Sign
1	2203b301000 18	Akhilesh Kumar Yadav	Akh
2	2203b30100066	Guddu Kumar Manjhi	Guddu
3	2203b30 100065	Faisal Khan	faisal
4	2203b30100059	Deepak Kumar Ram	Deepak
5		Deepak Kumar Pandit	Deepak
6		Abishek Soni	Abh
7		Dhiraj Kumar	Dhiraj
8		Abdul Qualiee	Abdul
9	2203b30100006	Abhishek Kumar Singh	abh
10	2203b3010002 9	Ankit Kumar Singh	Ankit
11	2203b3010001 1	Aditya Anand	Aditya
12	2203b30100066	Gaurav Kumar	Gaurav
13	2203b30100012	Aditya Kumar	Aditya
14	2203b30100	Divyanshu Kesar	Div

Glimpses of Roleplay Activity

EVALUATION OF THE ACTIVITY

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Flipped Classroom

Evaluation Sheet

Course Name:	Compiler Design	Date:	27/3/25
Branch:	CSE	Year:	
Section:		Instructor Name:	VIPIN KAWAT
Topic Name:	Lexical Analysis & Parsing		

Sr. No	Roll No.	Group	Name of Student	Pre-Class Preparation (5)	Classroom Discussion (5)	Problem Solving Skills (5)	Total Score(15)	Remarks
1		G1	Akhilesh Kr Verma	4	4	5	13	II
2			Gaurav Kr Kanojia					
3			Jalaluddin Khan					
4			Deepak Kr Gupta					
5		G2	Deepak Kr Gupta	5	5	4	14	II
6			Abhishek Soni					
7			Brijesh Kr					
8			Abdul					
9		G3	Abhishek Kr Sahu	5	5	5	15	I
10			Aditya Tyagi					
11			Aditya Tyagi					
12			Aditya Kr					
13		G4	Aditya Kr	3	4	3	10	
14			Dhirendra Kumar					

HOD Sign with Date 27.3.25

Instructor Sign with Date 27/3/25

□ Outcomes Achieved:

- Developed clear understanding of tokenization, regular expressions, and finite automata in lexical analysis.
- Understood different types of parsers: top-down and bottom-up parsing.
- Improved collaboration and communication skills among students.
- Promoted peer-to-peer learning and active participation.

□ Instructor’s Remarks:

The flipped classroom strategy effectively engaged students in active learning. All participants contributed well, and the team-based discussions allowed a deeper understanding of the subject matter. Looking forward to similar engaging sessions in future topics.