



## Department of Information Technology

Academic Year :- 2023-24	Class:- Third Year
Semester :- V	Date :- 25 Oct 2023 –01 Nov 2023
CO :- CO4	PO :-PO1,PO2,PO3,PO5

### Name of Innovative Method: J-Flap Tool

1. **Name of Faculty:** - Ms. D. R. Gatne

2. **Subject:** Theory of Computation

3. **Objective of Method:**

Student will be able to solve different problem based upon PDA, TM using this tool. Learning using tool will be interesting and easy

4. **Topic Covered through Activity:**

PDA, TM.

5. **Description of method with Benefits:**

Teacher gives demo to student regarding how to use tool and benefits of using it and then student can use this toll to solve different problem and analyze working of machine for input.

### Roles and Responsibilities:

• **Teacher:**

- Give tool demonstration to students.
- Assess the problem solved by student.

• **Student:**

- Understand tool usage.
- Student should be able to implement any one problem using tool and analyze working of same by giving some input.

## 6. Assessment Rubrics:

Evaluation Criteria	SC	Level1 (8-10M/ 4-5M)	Level2 (6-8M/ 2-3M)	Level3 (0-6M /0-1M)
Complexity of problem statement	5	Complex	Moderate	Easy
Construction of Automaton	10	Correct	Partially correct	Wrong
Correctness verification	5	Correct	Partially correct	Wrong

## 7. Evaluation Sheet

Sr.No	Name of Student	Complexity of problem statement	Construction of Automaton	Correctness verification	Total
1	Ahire Harshali Sanjay	5	10	5	20
2	Pratiksha Sandip Ahire	4	10	5	19
3	Bagul Dhiraj				AB
4	Bankar Aditya Madhav				AB
5	Deepak Dadasaheb Bhalerao	3	8	5	17
6	janhavi rajesh bhambare	3	10	3	16
7	Pratik Sharad Borade	3	7	5	15
8	Samiksha Dipak Bramhankar	3	7	4	14
9	Rohit Namdev Dahatonde	4	7	4	15
10	Tejasvini Vijay Dandge	3	7	5	15
11	Yash Sharad Deore	7	4		11
12	Darshana Shyamnath Dusing				AB
13	Gaurav Fate	4	7	5	16
14	Rashmi Sham Ghorpade	4	10	5	19
15	Gosavi Prathamesh Pramod	4	10	5	19
16	Rutuja Gunjal	2	10	5	17
17	Prasad Ramesh Ingole				AB
18	Purva Randhir Jadhav				AB
19	Om kapadnis	2	4	4	10
20	Aditi Katale	3	7	-	10
21	Vidya dattu kekan	3	10	5	18
22	Shantanu madhav khaire	3	4	5	12
23	Prathamesh Khairnar				AB
24	Khatale Shital Dilip	2	9	5	16
25	Harsh Koshti	3	10	5	18
26	Pooja Sunil Kshirsagar	3	10	5	18
27	Rushikesh Rajendra Kushare	3	9	5	17

28	Mansi Rahul Mahajan	3	10	5	18
29	Mahajan Tanmay Yogeshwar				AB
30	Divya Bhagwat Mahajan	4	10	5	19
31	Sanjana Mahale	3	8	5	16
32	Sayali Arvind Marathe				AB
33	Samruddhi Devendra Mulherkar	3	10	5	18
34	Harshwardhan Nichit				AB
35	Mansi Nitin Nikam	3	8	0	11
36	Nikhil Samadhan Nikam				13
37	Payal bhagwat padmane				AB
38	Roshan Nandkishor Pagar	4	9	4	17
39	Sneha Shankar Pardeshi	3	7	5	15
40	Patil Yash Lalitkumar				AB
41	Yash Sachin Patil	3	7	4	18
42	Om Ashok Patil	3	10	5	18
43	Piyush Yogesh Patil	3	10	3	16
44	Patil Yogeshwar Jitendra	5	10	4	19
45	Tanay Rajendra Tare	3	10	5	18
46	Sanika patil	4	10	5	19
47	Tanmay Pramod Patil	3	8	3	14
48	Tejashree Sanjay Rasal	5	7	5	17
49	Aditya Rayate	3	8	5	16
50	Vedant Hemant Sarolkar	3	10	3	16
51	Dikshant Bharat Sawant	3	6	5	14
52	Divya shewale	5	10	5	20
53	Kunal Shewale	3	10	5	18
54	Kaveri Vinod Shinde	3	7	5	15
55	Yashashri shinde	4	7	4	15
56	Sonawane Nikita Sunil	3	7		10
57	Surwade Gayatri Dilip	4	6	4	14
58	Varad Pandurang Suryawanshi	3	7	5	15
59	Avishkar Arjun Tathe				17
60	Ajit Popat Thakare				11
61	Manisha Bhagawan Urade	3	8	5	16
62	Gayatri Narendra Bhalerao				16
63	Vaidehi Rajesh chavan	3	6	5	14
64	Devendra Kakaji Deore				AB
65	Jayesh Gangaram Gavit				AB
66	Aniket Sunil Kshirsagar				AB
67	Palde Dhanashri Rajesh	3	8	5	16
68	Snehal Mahesh Mogal	3	6	5	14
69	Omkar Vitthal Savant	3	9	5	17
70	Nikita Ashroba Vharkate	3	4	5	12
71	Pawar Utkarsh Sanjay				AB

Sr. No.	<b>Result Analysis</b>	
1	Total Student Present	<b>56</b>
2	Number of Student Scoring above 60%	<b>42</b>
3	Percentage of student Scoring above 60%	<b>76%</b>

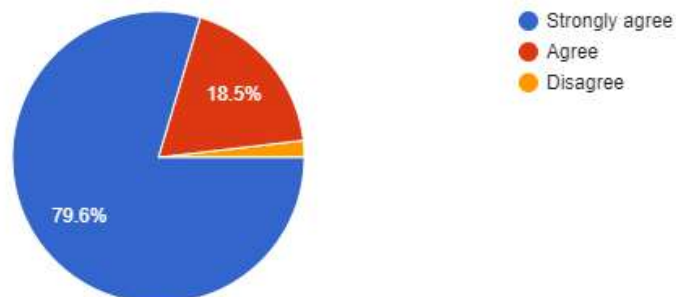
## 8. Impact Analysis:

Questions	3 – Strongly Agree / Excellent	2 – Agree / Good	1- Disagree / Average
It is easy to design and analyze automaton or grammar using tool?	43	10	01
Tool is helpful for better understanding of Automaton Theory?	47	07	01

It is easy to design and analyze automaton or grammar using tool

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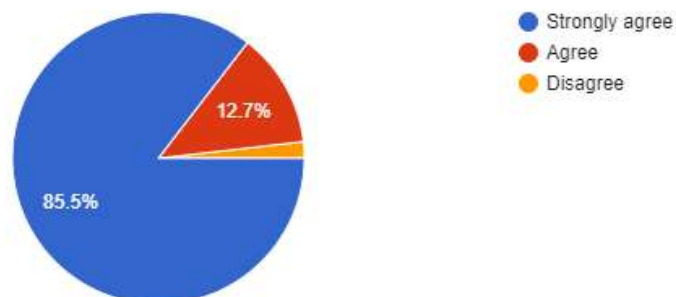
54 responses



Tool is helpful for better understanding of Automaton Theory?

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55 responses



9. Activity photo:

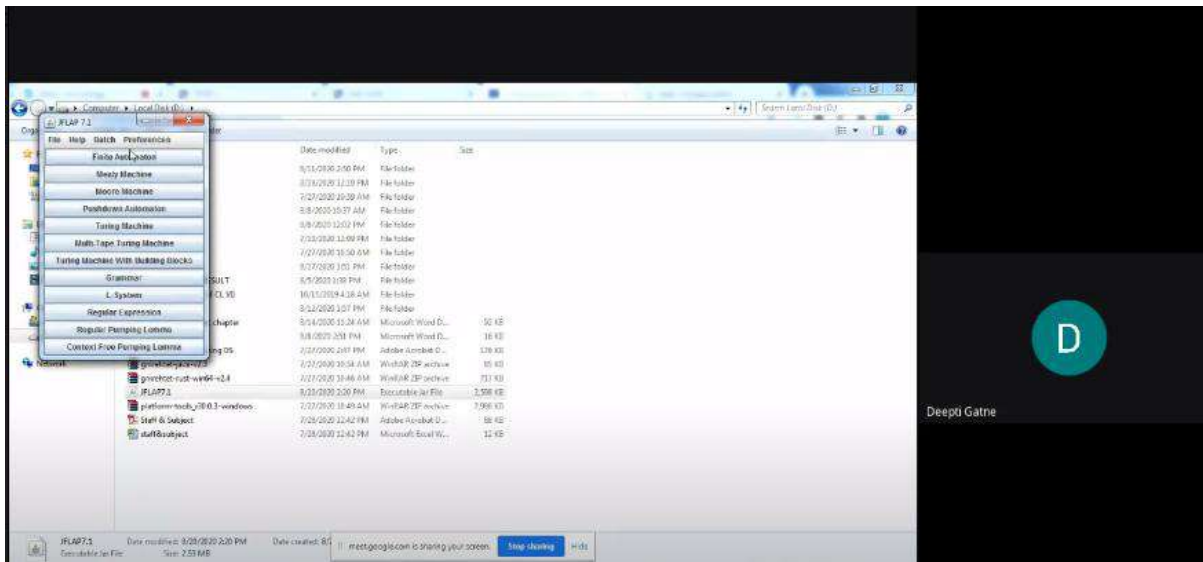
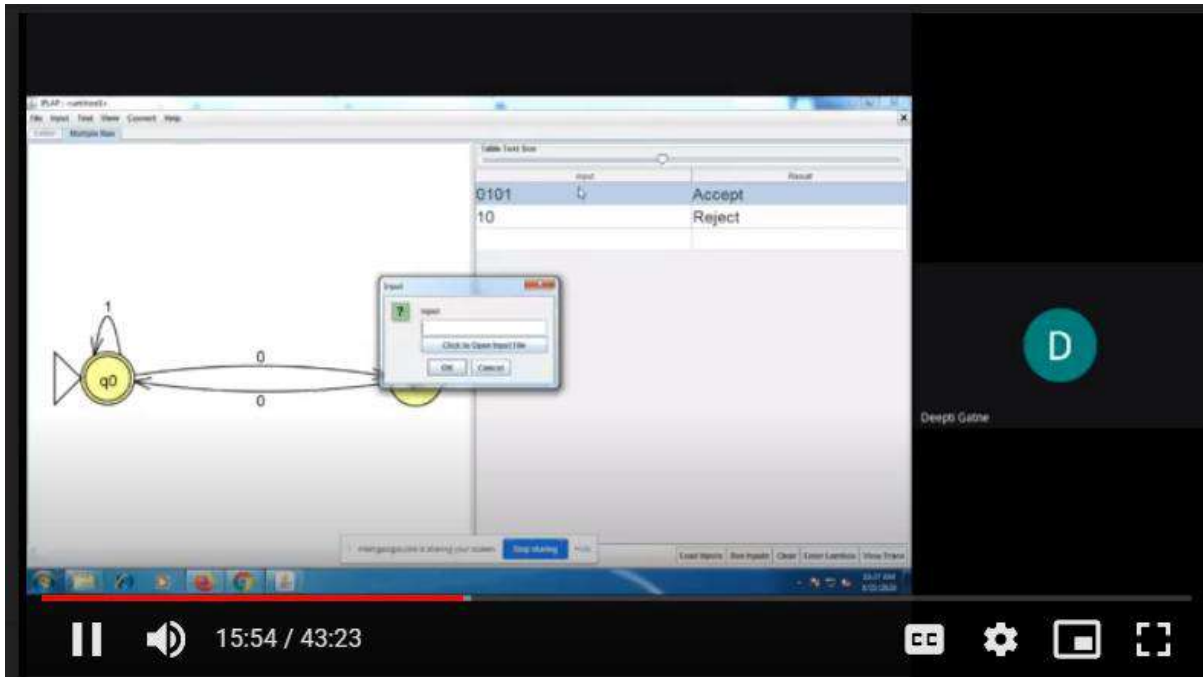
State diagram drawn using JFlap Tool (Expected minimum 5 to 7 state)

Screenshot of input processing ( click on view trace for this)

The screenshot displays the JFlap Tool interface. At the top, a state diagram is shown with three states: q0 (start state), q1, and q2 (final state). Transitions are labeled with input/output symbols: q0 to q0 (a, Y:YY and a, Z:YZ), q0 to q1 (b, Y:λ), q0 to q2 (λ, Z:Z), q1 to q1 (b, Y:λ), and q1 to q2 (λ, Z:Z).

Below the diagram is a test table with the following content:

Input	Result
aaabbb	Accept
asbb	Accept
asabb	Reject
saabbb	Reject
ab	Accept
ba	Reject



**10. For review and critique contact: e-mail address of faculty and HOD**

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