1.DFA SIMULATOR:-

AIM:-

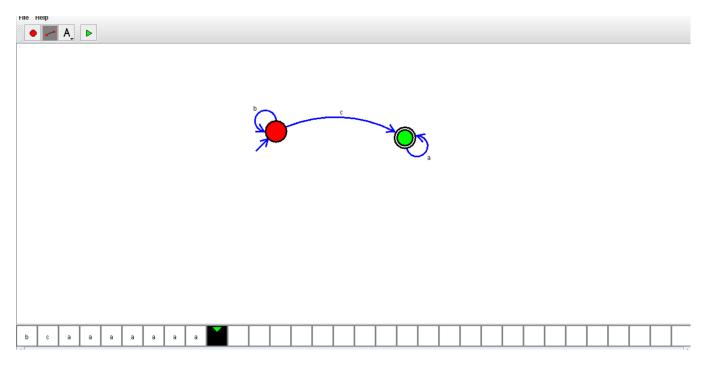
• To construct the DFA diagram by using simulator.

PROCEDURE:-

- ✓ Initially , install the autosimulator.
- ✓ open the autosim , click on the files.
- ✓ select the new and choose the DFA .
- ✓ Take two states .one is for initial state and another for final state.
- ✓ Connect the two states that accepts the conditions.
- ✓ click the run button and give the input.
- ✓ check the DFA diagram it will reach final state or not.
- ✓ it will reach final state means construction of our DFA diagram is correct.

DIAGRAM AND OUTPUT:-

INPUT=bcaaaaaaaaa,bc,c



We got the output successfully . therefore the DFA diagram will accepts the conditions.

2.NFA SIMULATOR

AIM:-

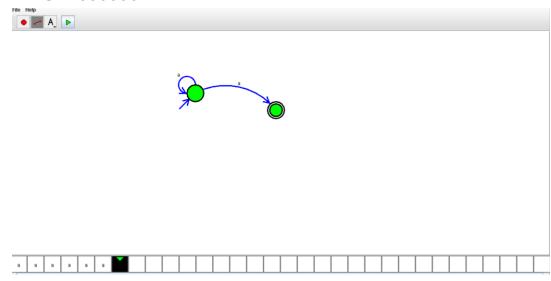
To construct the NFA diagram by using simulator.

- 1.Initially,install the autosimulator.
- 2.open the autosim, click on the files.
- 3.select the new and choose the NFA.
- 4. Take two states .one is for initial state and another for final state.
 - 5. Connect the two states that accepts the conditions.
- 6.click the run button and give the input.
- 7.check the NFA diagram it will reach final state or not.

8.it will reach final state means construction of our NFA diagram is correct.

DIAGRAM AND OUTPUT:-

INPUT:-aaaaaa



RESULT:-

❖ We got the output successfully . therefore the NFA diagram will accepts the conditions.

3.PDA STIMULATOR

AIM:-

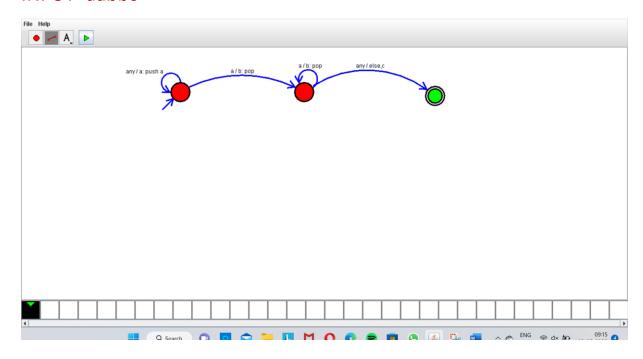
✓ To construct the PDA diagram by using the simulator.

And prove that the conditions have given.

- 1.Initially, install the autosimulator.
- 2.open the autosim , click on the files.
- 3.open new and select PDA diagram.
- 4.draw the PDA diagram with representing present state, next state and final state.
- 5. give the connections such that it accepts the input.

- 6.make sure that the given connections are satisfy the conditions.
- 7.click the run button and give the input.
- 8.check the PDA diagram it will reach final state or not.
- 9.it will reach final state means construction of our PDA diagram is correct.

INPUT=aabbc



RESULT:-

❖ We got the output successfully . therefore the PDA diagram will accepts the conditions.

4.TURING MACHINE

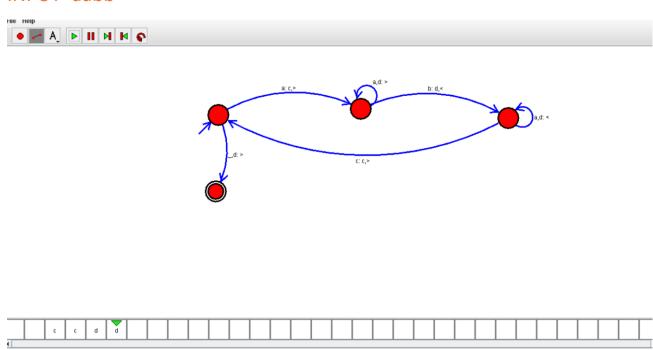
AIM:-

 To construct the Turing Machine diagram by using the simulator. And prove that the conditions have given.

- ✓ Initially,install the autosimulator.
- ✓ open the autosim , click on the files.

- ✓ open new and select Turing Machine diagram.
- ✓ draw the Turing Machine diagram with representing present state, next state and final state.
- ✓ give the connections such that it accepts the input.
- ✓ make sure that the given connections are satisfy the conditions.
- ✓ give the input and click on the run button.
- ✓ Check the Turing Machine diagram it will reach final state or not.
- ✓ it will reach final state means construction of our Turing Machine diagram is correct.

INPUT=aabb



RESULTS:-

We got the output successfully . therefore the Turing Machine diagram will accepts the conditions.

5.PDA STIMULATOR

AIM:-

✓ To construct the PDA diagram by using the simulator.

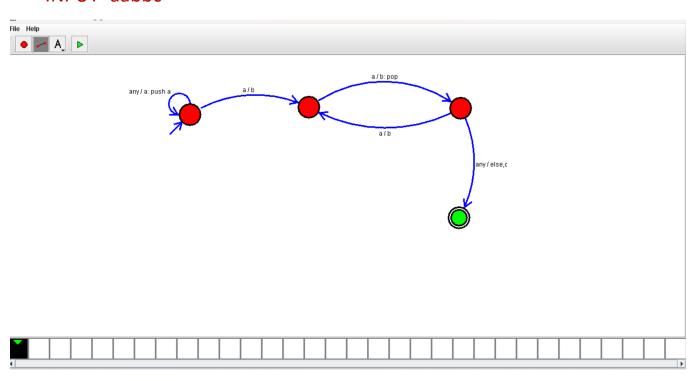
And prove that the conditions have given.

PROCEDURE:-

- 1.Initially,install the autosimulator.
- 2.open the autosim , click on the files.
- 3.open new and select PDA diagram.
- 4.draw the PDA diagram with representing present state, next state and final state.
- 5. give the connections such that it accepts the input.
- 6.make sure that the given connections are satisfy the conditions.
- 7.click the run button and give the input.
- 8.check the PDA diagram it will reach final state or not.
- 9.it will reach final state means construction of our PDA diagram is correct.

DIAGRAM AND OUTPUT:-

INPUT=aabbc



RESULT:-

We got the output successfully . therefore the PDA diagram will accepts the conditions.

6.TURING MACHINE STIMULATION-PALINDROME

AIM:-

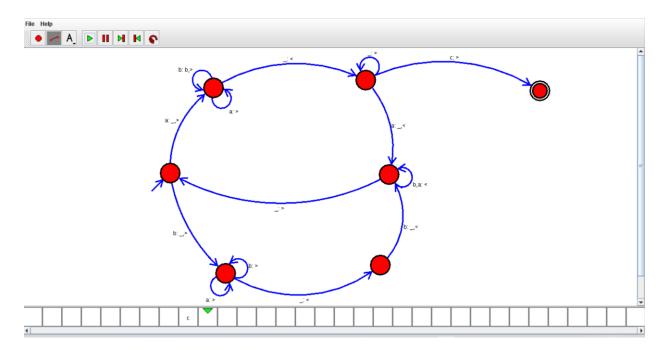
• To construct the Turing Machine diagram by using the simulator. And prove that the conditions have given.

PROCEDURE:-

- ✓ Initially,install the autosimulator.
- ✓ open the autosim , click on the files.
- ✓ open new and select Turing Machine diagram.
- ✓ draw the Turing Machine diagram with representing present state, next state and final state.
- ✓ give the connections such that it accepts the input.
- ✓ make sure that the given connections are satisfy the conditions.
- ✓ give the input and click on the run button.
- ✓ Check the Turing Machine diagram it will reach final state or not.
- ✓ it will reach final state means construction of our Turing Machine diagram is correct.

DIAGRAM AND OUTPUT:-

INPUT =ababa c



We got the output successfully . therefore the Turing Machine diagram will accepts the conditions.

7.TURING MACHINE-ADDITION

AIM:-

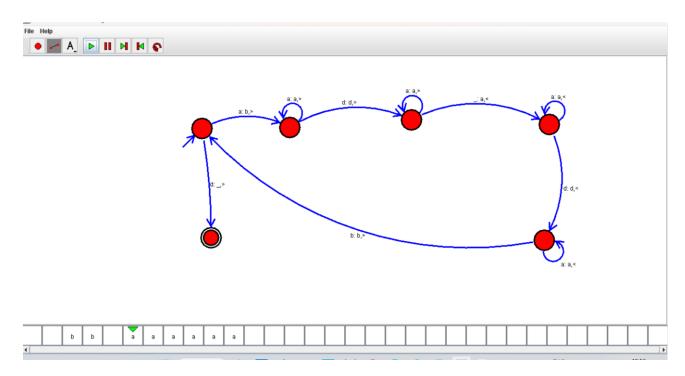
• To construct the Turing Machine diagram by using the simulator. And prove that the conditions have given.

- ✓ Initially,install the autosimulator.
- ✓ open the autosim , click on the files.
- ✓ open new and select Turing Machine diagram.
- ✓ draw the Turing Machine diagram with representing present state, next state and final state.
- ✓ give the connections such that it accepts the input.
- ✓ make sure that the given connections are satisfy the conditions.
- ✓ give the input and click on the run button.
- ✓ Check the Turing Machine diagram it will reach final state or not.

✓ it will reach final state means construction of our Turing Machine diagram is correct.

DIAGRAM AND OUTPUT:-

INPUT=aadaaaa



RESULTS:-

We got the output successfully . therefore the Turing Machine diagram will accepts the conditions.

8.TURING MACHINE – SUBTRACTION

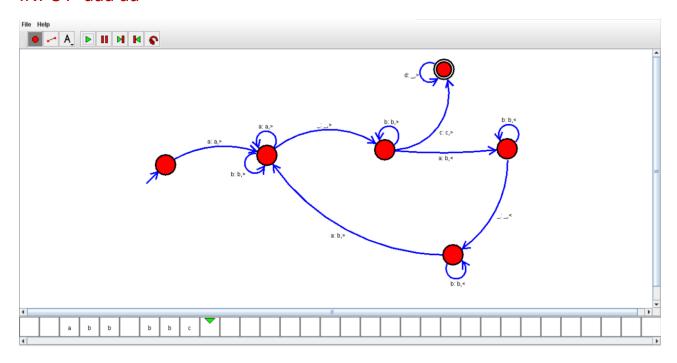
AIM:-

• To construct the Turing Machine diagram by using the simulator. And prove that the conditions have given.

- ✓ Initially,install the autosimulator.
- ✓ open the autosim , click on the files.
- ✓ open new and select Turing Machine diagram.

- ✓ draw the Turing Machine diagram with representing present state, next state and final state.
- ✓ give the connections such that it accepts the input.
- ✓ make sure that the given connections are satisfy the conditions.
- ✓ give the input and click on the run button.
- ✓ Check the Turing Machine diagram it will reach final state or not.
- ✓ it will reach final state means construction of our Turing Machine diagram is correct.

INPUT=aaa aa



RESULTS:-

We got the output successfully . therefore the Turing Machine diagram will accepts the conditions.

9.TURING MACHINE - STRING

AIM:-

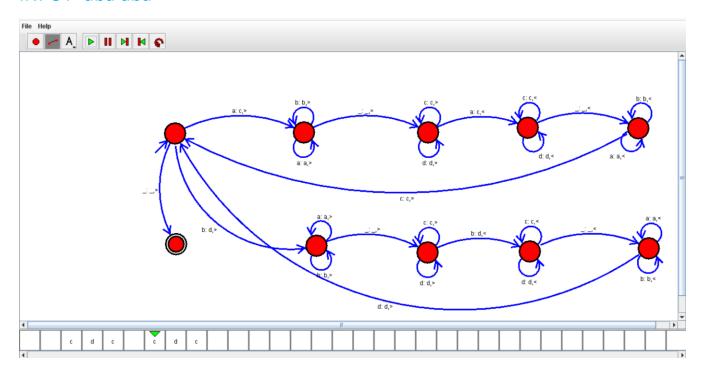
 To construct the Turing Machine diagram by using the simulator. And prove that the conditions have given.

PROCEDURE:-

- ✓ Initially,install the autosimulator.
- ✓ open the autosim , click on the files.
- ✓ open new and select Turing Machine diagram.
- ✓ draw the Turing Machine diagram with representing present state, next state and final state.
- ✓ give the connections such that it accepts the input.
- ✓ make sure that the given connections are satisfy the conditions.
- ✓ give the input and click on the run button.
- ✓ Check the Turing Machine diagram it will reach final state or not.
- ✓ it will reach final state means construction of our Turing Machine diagram is correct.

DIAGRAM AND OUTPUT:-

INPUT=aba aba



We got the output successfully . therefore the Turing Machine diagram will accepts the conditions.

10.DFA-EVEN A

AIM:-

• To construct the DFA diagram by using simulator.

PROCEDURE:-

- ✓ Initially , install the autosimulator.
- ✓ open the autosim , click on the files.
- ✓ select the new and choose the DFA.
- ✓ Take two states .one is for initial state and another for final state.
- ✓ Connect the two states that accepts the conditions.
- ✓ click the run button and give the input.
- ✓ check the DFA diagram it will reach final state or not.
- ✓ it will reach final state means construction of our DFA diagram is correct.

DIAGRAM AND OUTPUT:-

INPUT=A





❖ We got the output successfully . therefore the DFA diagram will accepts the conditions.

11.DFA-ODD-A

AIM:-

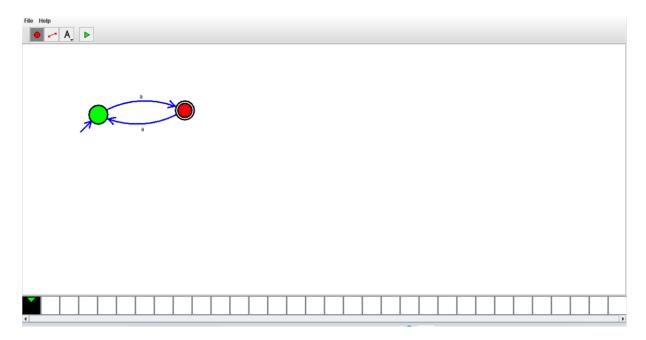
• To construct the DFA diagram by using simulator.

PROCEDURE:-

- ✓ Initially , install the autosimulator.
- ✓ open the autosim , click on the files.
- ✓ select the new and choose the DFA .
- ✓ Take two states .one is for initial state and another for final state.
- ✓ Connect the two states that accepts the conditions.
- ✓ click the run button and give the input.
- ✓ check the DFA diagram it will reach final state or not.
- ✓ it will reach final state means construction of our DFA diagram is correct.

DIAGRAM AND OUTPUT:-

INPUT=A



• We got the output successfully . therefore the DFA diagram will accepts the conditions.

12.DFA SUBSTRING ab

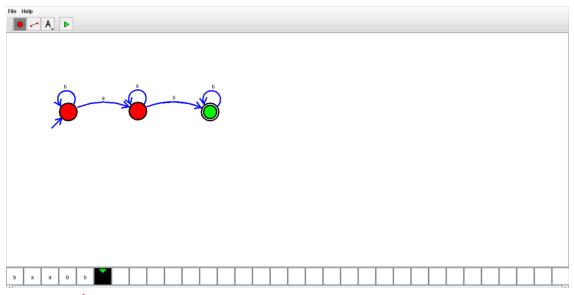
AIM:-

• To construct the DFA diagram by using simulator.

PROCEDURE:-

- ✓ Initially , install the autosimulator.
- ✓ open the autosim , click on the files.
- ✓ select the new and choose the DFA .
- ✓ Take Two states .one is for initial state and another for final state.
- ✓ Connect the two states that accepts the conditions.
- ✓ click the run button and give the input.
- ✓ check the DFA diagram it will reach final state or not.
- ✓ it will reach final state means construction of our DFA diagram is correct.

DIAGRAM AND OUTPUT:-



INPUT=ab

• We got the output successfully . therefore the DFA diagram will accepts the conditions.

13.DFA START WITH A OR B

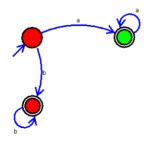
AIM:-

• To construct the DFA diagram by using simulator.

- ✓ Initially , install the autosimulator.
- ✓ open the autosim , click on the files.
- ✓ select the new and choose the DFA .
- ✓ Take two states .one is for initial state and another for final state.
- ✓ Connect the two states that accepts the conditions.
- ✓ click the run button and give the input.
- ✓ check the DFA diagram it will reach final state or not.
- ✓ it will reach final state means construction of our DFA diagram is correct.

INPUT=aa







RESULTS:-

We got the output successfully . therefore the DFA diagram will accepts the conditions.