HOLY CROSS COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI-2

PG AND RESEARCH DEPARTMENT OF MATHEMATICS

WEBINAR REPORT

The Mathematics Association conducted a webinar on the topic "Designing Finite State Automata" in Google Meet Platform. The resource person was Dr.T. Rajaretnam, Head and Associate Professor, PG & Research Department of Mathematics, St. Joseph's College (Autonomous), Tiruchirappalli.

The webinar commenced by invoking the presence of God Almighty through prayer by Ms. R. Aishwarya, Assistant Professor, Department of Mathematics, Holy Cross College (Autonomous), Tiruchirappalli. Dr. W. Ritha, Head and Assistant Professor, Department of Mathematics, Holy Cross College (Autonomous), Tiruchirappalli welcomed the Resource Person and the gathering.

The lecture delivered by the resource person mainly focused on designing finite automata. He gave detailed explanation on string catenation, transition diagram and regular expressions. He further discussed the classification of Automata such as Deterministic Finite State Automation (DFA) and Non-Deterministic Finite State Automation (NFA) with an appropriate illustrations.

At the end of the lecture session, the resource person clarified the queries raised by the participants.

Ms. A. Saranya, Assistant Professor, Department of Mathematics, Holy Cross College(Autonomous), Tiruchirappalli delivered the Vote of thanks and the webinar ended successfully.

HOLY CROSS COLLEGE (AUTONOMOUS)

Affiliated to Bharathidasan University
Nationally Accredited (4th Cycle) with A++ Grade (CGPA 3.75/4) by NAAC
College with Potential for Excellence
Tiruchirappalli – 620 002.

PG & Research Department of Mathematics
Organises a webinar on

DESIGNING FINITE STATE AUTOMATA

Presided by
Rev. Dr. (Sr) A. Christina Bridget
Principal
Holy Cross College (Autonomous)
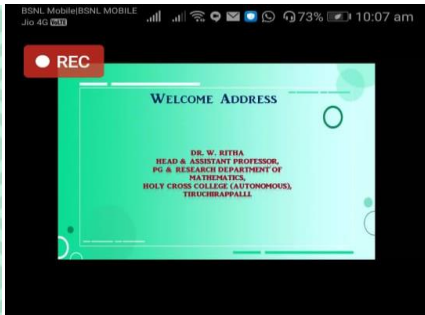Tiruchirappalli-620 002

Resource Person
Dr. T. Rajaretnam
Head and Associate Professor
PG & Research Department of Mathematics
St. Joseph's College (Autonomous)
Tiruchirappalli-620 002

Date: 01.08.2020
Time: 10.00 a.m to 11.30 a.m

Join us @

Google Meet

Register NOW!

Organised by
Dr. W. Ritha
Head and Assistant Professor
PG & Research Department of Mathematics
Holy Cross College (Autonomous)
Tiruchirappalli-620 002

No Registration Fee & E-Certificate will be provided.

WELCOME ADDRESS

DR. W. RITHA
HEAD & ASSISTANT PROFESSOR,
PG & RESEARCH DEPARTMENT OF MATHEMATICS,
HOLY CROSS COLLEGE (AUTONOMOUS),
TIRUCHIRAPPALLI

● REC

(93)

Jenni pretha (You)

Jenni pretha — NEW

Jarobhiya Thavaseelan

Ritha Prakash

Others in the meeting (89)

● REC

(93)

Jenni pretha (You)

maryjansi rani
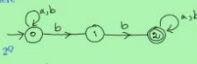
T RAJARETNAM

Ritha Prakash

Others in the meeting (89)

● REC

A Non Deterministic Finite State Automaton (NFA) is an ordered 5-tuple $M = (Q, \Sigma, \delta, q_0, F)$, where
Q is the set of states
Σ is the set of input symbols
δ is the transition function, $\delta : Q \times \Sigma \to 2^Q$
$q_0 \in Q$ is the initial (start) state
$F \subset Q$, the set of final(accept) states
A string x is accepted if $\delta(q_0, x) \cap F \neq \phi$ The language accepted by M is $L(M) = \{x \in \Sigma^* | \delta(q_0, x) \cap F \neq \phi\}$

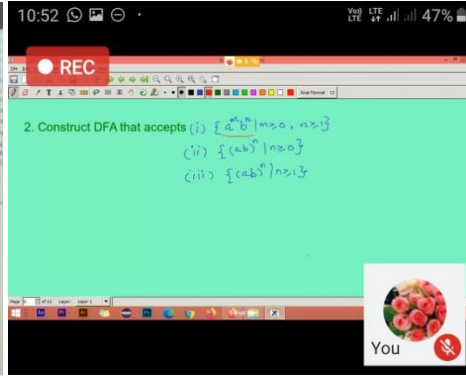$Q \times \Sigma = \{(q_0, a), (q_0, b), (q_1, a), (q_1, b), (q_2, a), (q_2, b)\}$

10:38

(114)

Aishwarya R (You)

T RAJARETNAM

maryjansi rani

T RAJARETNAM

Others in the meeting (110)

2. Construct DFA that accepts (i) $\{a^m b^n \mid m \geq 0, n \geq 1\}$
(ii) $\{(ab)^n \mid n \geq 0\}$
(iii) $\{(ab)^n \mid n \geq 1\}$

You

👥 (116)   💬 1   ⓘ

Aishwarya R (You)

T RAJARETNAM   ›

Jenni pretha   ›

T RAJARETNAM   ›

Others in the meeting (112)

👥 (118)   💬   ⓘ

what is the limitation of string.

You   2 mins
Dear Participants, You can post your queries in chat box.

Chitra Kannan   2 mins
At what

criteria we are forming strings

Ankur anuraag Saurav   Now
What is the rule of draw the transaction diagram?

Is States be infinite ?

Send a message to everyone here   ➤