Mindluster Platform

About the course Deterministic Finite Automata

Deterministic Finite Automata course, in this course Explore DFA theory and applications in this course, covering their role in pattern recognition and formal language analysis.

Computer Science Category's Courses

Course Lesson(114)

Lesson 1 : **Introduction to Theory of Computation**

Lesson 2 : **Finite State Machine Prerequisites**

Lesson 3 : **Finite State Machine Finite Automata**

Lesson 4 : **Deterministic Finite Automata Example 1**

Lesson 5 : **Deterministic Finite Automata Example 2**

Lesson 6 : **Deterministic Finite Automata Example 3**

Lesson 7 : **Deterministic Finite Automata Example 4**

Lesson 8 : **Regular Languages**

Lesson 9 : **Operations on Regular Languages**

Lesson 10 : **Non Deterministic Finite Automata**

Lesson 11 : **Formal Definition of Non Deterministic Finite Automata NFA**

Lesson 12 : **Non Deterministic Finite Automata Solved Example 1**

Lesson 13 : **Non Deterministic Finite Automata Solved Example 2**

Lesson 14 : **Non Deterministic Finite Automata Solved Example 3**

Lesson 15 : **Conversion of NFA to DFA**

Lesson 16 : **Conversion of NFA to DFA Example 1**

Lesson 17 : **Conversion of NFA to DFA Example 2**

Lesson 18 : **Conversion of NFA to DFA Example 3**

Lesson 19 : **Conversion of NFA to DFA Example 4**

Lesson 20 : **Minimization of Deterministic Finite Automata DFA**

Lesson 21 : **Minimization of DFA Example 1**

Lesson 22 : **Minimization of DFA Example 2**

Lesson 23 : **Minimization of DFA With Multiple Final States**

Lesson 24 : **Minimization of DFA With Unreachable States**

Lesson 25 : **Myhill Nerode Theorem Table Filling Method**

Lesson 26 : **Myhill Nerode Theorem Table Filling Method Example**

Lesson 27 : **Finite Automata With Outputs**

Lesson 28 : **Construction of Mealy Machine**

Lesson 29 : **Construction of Mealy Machine Example 1**

Lesson 30 : **Construction of Mealy Machine Example 2**

Lesson 31 : **Construction of Moore Machine**

Lesson 32 : **Construction of Moore Machine Example 1**

Lesson 33 : **Construction of Moore Machine Example 2**

Lesson 34 : **Conversion of Moore Machine to Mealy Machine**

Lesson 35 : **Conversion of Moore Machine to Mealy Machine Example 1**

Lesson 36 : **Conversion of Moore Machine to Mealy Machine Example 2**

Lesson 37 : **Conversion of Mealy Machine to Moore Machine**

Lesson 38 : **Conversion of Mealy Machine to Moore Machine Example 1**

Lesson 39 : **Conversion of Mealy Machine to Moore Machine Example 2**

Lesson 40 : **Conversion of Mealy Machine to Moore Machine Using Transition Table**

Lesson 41 : **Epsilon NFA**

Lesson 42 : **Conversion of Epsilon NFA to NFA**

Lesson 43 : **Conversion of Epsilon NFA to NFA Examples Part 1**

Lesson 44 : **Conversion of Epsilon NFA to NFA Examples Part 2**

Lesson 45 : **Regular Expression**

Lesson 46 : **Regular Expression Examples**

Lesson 47 : **Identities of Regular Expression**

Lesson 48 : **Arden s Theorem**

Lesson 49 : **An Example Proof using Identities of Regular Expressions**

Lesson 50 : **Designing Regular Expressions**

Lesson 51 : **NFA to Regular Expression Conversion**

Lesson 52 : **DFA to Regular Expression Conversion**

Lesson 53 : **DFA to Regular Expression Conversion when the DFA has Multiple Final States**

Lesson 54 : **Conversion of Regular Expression to Finite Automata**

Lesson 55 : **Conversion of Regular Expression to Finite Automata Examples Part 1**

Lesson 56 : **Conversion of Regular Expression to Finite Automata Examples Part 2**

Lesson 57 : **Conversion of Regular Expression to Finite Automata Examples Part 3**

Lesson 58 : **Equivalence of Two Finite Automata**

Lesson 59 : **Equivalence of Two Finite Automata Example**

Lesson 60 : **Pumping Lemma For Regular Languages**

Lesson 61 : **Pumping Lemma For Regular Languages | Example 1**

Lesson 62 : **Pumping Lemma For Regular Languages | Example 2**

Lesson 63 : **Regular Grammar**

Lesson 64 : **Derivations from a Grammar**

Lesson 65 : **Context Free Grammar Context Free Language**

Lesson 66 : **Regular Languages Finite Automata Solved Problem 1**

Lesson 67 : **Regular Languages Finite Automata Solved Problem 2**

Lesson 68 : **Regular Languages Finite Automata Solved Problem 3**

Lesson 69 : **Regular Languages Finite Automata Solved Problem 4**

Lesson 70 : **Regular Languages Finite Automata Solved Problem 5**

Lesson 71 : **Regular Languages Finite Automata Solved Problem 6**

Lesson 72 : **Method to find whether a string belong to a Grammar or not**

Lesson 73 : **Derivation Tree Left Right Derivation Trees**

Lesson 74 : **Ambiguous Grammar**

Lesson 75 : **Simplification of CFG Reduction of CFG**

Lesson 76 : **Simplification of CFG Removal of Unit Productions**

Lesson 77 : **Simplification of CFG Removal of Null Productions**

Lesson 78 : **Chomsky Normal Form CFG to CNF Conversion**

Lesson 79 : **Conversion of CFG to Chomsky Normal Form**

Lesson 80 : **Greibach Normal Form CFG to GNF Conversion**

Lesson 81 : **CFG to GNF Conversion Removal of Left Recursion**

Lesson 82 : **Pumping Lemma For Context Free Languages**

Lesson 83 : **Pumping Lemma For Context Free Languages Examples Part 1**

Lesson 84 : **Pumping Lemma For Context Free Languages Examples Part 2**

Lesson 85 : **Pushdown Automata Introduction**

Lesson 86 : **Pushdown Automata Formal Definition**

Lesson 87 : **Pushdown Automata Graphical Notation**

Lesson 88 : **Pushdown Automata Example Even Palindrome PART 1**

Lesson 89 : **Pushdown Automata Example Even Palindrome PART 2**

Lesson 90 : **Pushdown Automata Example Even Palindrome PART 3**

Lesson 91 : **Equivalence of CFG and PDA Part 1**

Lesson 92 : **Equivalence of CFG and PDA Part 2a**

Lesson 93 : **Equivalence of CFG and PDA Part 2b**

Lesson 94 : **Turing Machine Introduction Part 1**

Lesson 95 : **Turing Machine Introduction Part 2**

Lesson 96 : **Turing Machine Formal Definition**

Lesson 97 : **Turing Machine Example 1**

Lesson 98 : **Turing Machine Example 2**

Lesson 99 : **The Church Turing Thesis**

Lesson 100 : **Turing Machine for Even Palindromes**

Lesson 101 : **Turing Machine Programming Techniques Part 1**

Lesson 102 : **Turing Machine Programming Techniques Part 2**

Lesson 103 : **Turing Machine Programming Techniques Part 3**

Lesson 104 : **Multitape Turing Machine**

Lesson 105 : **Nondeterministic Turing Machine Part 1**

Lesson 106 : **Nondeterministic Turing Machine Part 2**

Lesson 107 : **Turing Machine as Problem Solvers**

Lesson 108 : **Decidability and Undecidability**

Lesson 109 : **Universal Turing Machine**

Lesson 110 : **The Halting Problem**

Lesson 111 : **Undecidability of the Halting Problem**

Lesson 112 : **The Post Correspondence Problem**

Lesson 113 : **Undecidability of the Post Correspondence Problem**

Lesson 114 : **TOC â€“ Conclusion and Summary**

Related courses

Linear Algebra for Computer Scientists

Insertion Sort

Bubble Sort

GCSE Computer Science

Random Access Memory

Binary Trees

for Business Contact
business@mindluster.com