



NPTEL (https://swayam.gov.in/explorer?ncCode=NPTEL) » Compiler Design (course)

Announcements (announcements) **About the Course (preview)** Ask a Question (forum) Progress (student/home) Mentor (student/mentor)

**Review Assignment (assignment\_review)**



Register for Certification  
exam

(https://examform.nptel.ac.in/2022\_01/exam\_form/dashboard)

# Thank you for taking the Week 2 : Assignment 2.

## Course outline

How does an NPTEL online  
course work?

Week 0 :

Week 1

Week 2

- Lecture 07 : Lexical Analysis  
(unit?unit=26&lesson=27)
- Lecture 08 : Lexical Analysis  
(Contd.) (unit?  
unit=26&lesson=28)
- Lecture 09 : Lexical Analysis  
(Contd.) (unit?  
unit=26&lesson=29)

## Week 2 : Assignment 2

Your last recorded submission was on 2022-02-09, 14:53 IST

Due date: 2022-02-09, 23:59 IST.

- 1) When the lexical analyzer reads the source code, it scans the code
- (A) Line-by-line
  - (B) Word-by-word
  - (C) Letter-by-letter
  - (D) Whole at a time

- ☐ (A)
- ☐ (B)
- ☒ (C)
- ☐ (D)

1 point

Assessment submitted.

X

● Lecture 10 : Lexical Analysis  
(Contd.) (unit?  
unit=26&lesson=30)

● Lecture 11 : Lexical Analysis  
(Contd.) (unit?  
unit=26&lesson=31)

● Lecture Materials (unit?  
unit=26&lesson=32)

● Quiz: Week 2 : Assignment 2  
(assessment?name=140)

○ Feedback Form (unit?  
unit=26&lesson=33)

Week 3

DOWNLOAD VIDEOS

Text Transcripts

Books

2) The regular expression for strings (over alphabet set  $\{0,1\}$ ) in which a '0' is always followed by at least two 1's (that is "11") is

- (A)  $1^*(011)^*$   
(B)  $1^*(011)^*$   
(C) Not possible to create such a regular expression  
(D) None of the other options

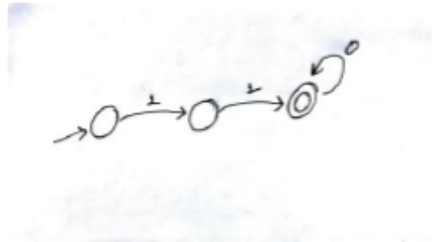
☒ (A)

☐ (B)

☐ (C)

☐ (D)

3) According to the following diagram which one of the following strings is not accepted by the diagram?



- (A) 110  
(B) 1111  
(C) 110000  
(D) 1100

☐ (A)

☒ (B)

☐ (C)

☐ (D)

1 point

1 point

Assessment submitted.  
X

4) The number of possible epsilon transitions from a state in an NFA is

1 point

- (A) Many
- (B) At most one
- (C) One
- (D) Zero

- ☒ (A)
- ☐ (B)
- ☐ (C)
- ☐ (D)

5) Between NFA and DFA which one is more powerful

1 point

- (A) NFA
- (B) DFA
- (C) both are powerful
- (D) Cannot be said definitely

- ☐ (A)
- ☐ (B)
- ☒ (C)
- ☐ (D)

6) A regular expression represents

1 point

- (A) Cannot represent any language
- (B) Part of a language
- (C) Constituent strings of a language
- (D) None of the other options

- ☐ (A)
- ☐ (B)
- ☒ (C)
- ☐ (D)

Assessment submitted.  
X

- 7) Finite automata is an implementation of
- (A) Part of a Regular expression
  - (B) Any grammar
  - (C) Regular expression
  - (D) None of the other options

☐ (A)  
☐ (B)  
☒ (C)  
☐ (D)

- 8) Which is easier to implement, the NFA or the DFA?
- (A) DFA
  - (B) NFA
  - (C) Equal effort needed
  - (D) Cannot be said definitely

☒ (A)  
☐ (B)  
☐ (C)  
☐ (D)

- 9) The regular expression  $(0|1)^*00$  will accept all strings
- (A) Divisible by 2
  - (B) Divisible by 4 with minimum length 2
  - (C) Divisible by 2 with minimum length 2
  - (D) Divisible by 4

☐ (A)  
☒ (B)  
☐ (C)  
☐ (D)

1 point

1 point

1 point

Assessment submitted.  
X

10) What exactly is a lexeme?

1 point

- (A) Any sequence of characters
- (B) Sequence of characters defining a token
- (C) Same as a token
- (D) Not related to any token

- ☐ (A)
- ☒ (B)
- ☐ (C)
- ☐ (D)

11) Output of the tool lex is

1 point

- (A) A C program
- (B) An executable code
- (C) A parser
- (D) None of the other options

- ☒ (A)
- ☐ (B)
- ☐ (C)
- ☐ (D)

You may submit any number of times before the due date. The final submission will be considered for grading.

**Submit Answers**