
# Design and Analysis of Algorithms

## Introduction


# Design and Analysis of Algorithms

## Introduction

# Topics

# Topics

- [ ] What is an Algorithm?
- [ ] Syllabus

# Topics

- [ ] What is an Algorithm?
- [ ] Syllabus
- [ ] Target Audience

# What is an Algorithm?



- Step-by-step procedure to solve a specific problem.

# What is an Algorithm?



- Step-by-step procedure to solve a specific problem.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

**Problem Statement**

Write an algorithm to scan the phone's contact list.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

Problem Statement

Write an algorithm to scan the phone's contact list.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

**Problem Statement**

Write an algorithm to scan the phone's contact list.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

**Steps**

1. Unlock your phone.
2. Open the Contacts app.
3. Start scanning the list.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

**Steps**

1. Unlock your phone.
2. Open the Contacts app.
3. Start scanning the list.
4. Compare the contact name with the desired contact name.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

**Steps**

1. Unlock your phone.
2. Open the Contacts app.
3. Start scanning the list.
4. Compare the contact name with the desired contact name.
5. If the names match, then match is found.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

**Steps**

1. Unlock your phone.
2. Open the Contacts app.
3. Start scanning the list.
4. Compare the contact name with the desired contact name.
5. If the names match, then match is found.
6. If the names do not match, then move to the next contact in the list.
7. Repeat until the desired contact is found.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

**Steps**

1. Unlock your phone.
2. Open the Contacts app.
3. Start scanning the list.
4. Compare the contact name with the desired contact name.
5. If the names match, then match is found.
6. If the names do not match, then move to the next contact in the list.
7. Repeat until the desired contact is found.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

**Steps**

1. Unlock your phone.
2. Open the Contacts app.
3. Start scanning the list.
4. Compare the contact name with the desired contact name.
5. If the names match, then match is found.
6. If the names do not match, then move to the next contact in the list.
7. Repeat until the desired contact is found.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

**Steps**

1. Unlock your phone.
2. Open the Contacts app.
3. Start scanning the list.
4. Compare the contact name with the desired contact name.
5. If the names match, then match is found.
6. If the names do not match, then move to the next contact in the list.
7. Repeat until the desired contact is found.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

**Steps**

1. Unlock your phone.
2. Open the Contacts app.
3. Start scanning the list.
4. Compare the contact name with the desired contact name.
5. If the names match, then match is found.
6. If the names do not match, then move to the next contact in the list.
7. Repeat until the desired contact is found.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

**Steps**

1. Unlock your phone.
2. Open the Contacts app.
3. Start scanning the list.
4. Compare the contact name with the desired contact name.
5. If the names match, then match is found.
6. If the names do not match, then move to the next contact in the list.
7. Repeat until the desired contact is found.

# What is an Algorithm?

- Step-by-step procedure to solve a specific problem.

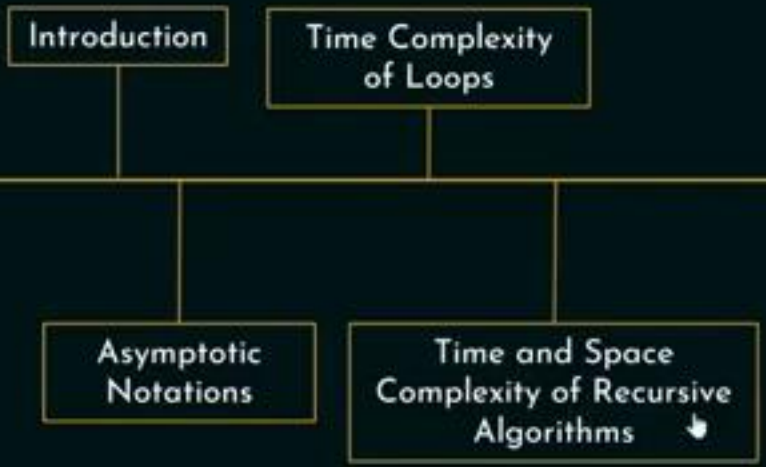
**Steps**

1. Unlock your phone.
2. Open the Contacts app.
3. Start scanning the list.
4. Compare the contact name with the desired contact name.
5. If the names match, then match is found.
6. If the names do not match, then move to the next contact in the list.
7. Repeat until the desired contact is found.

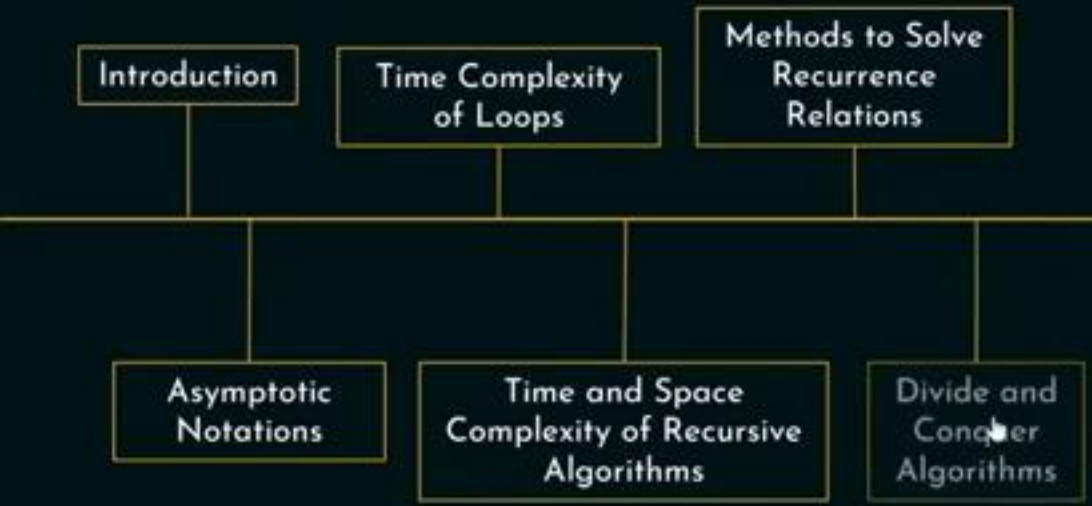
# Syllabus

# Syllabus

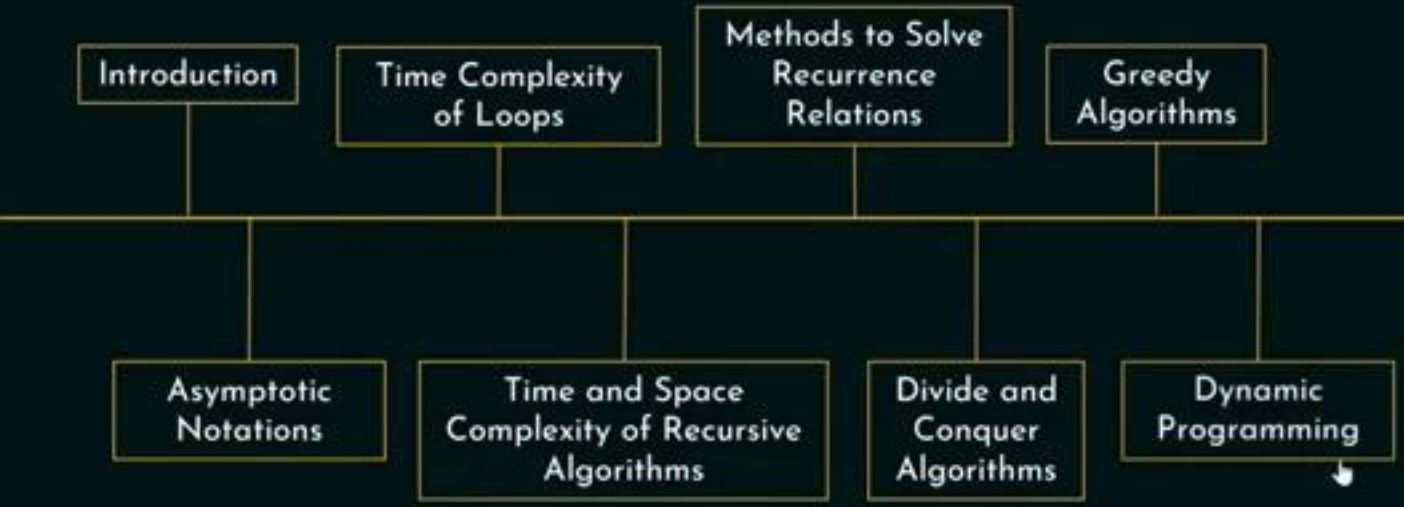
# Syllabus


Introduction
Time Complexity of Loops
Asymptotic Notations
Time and Space Complexity of Recursive Algorithms

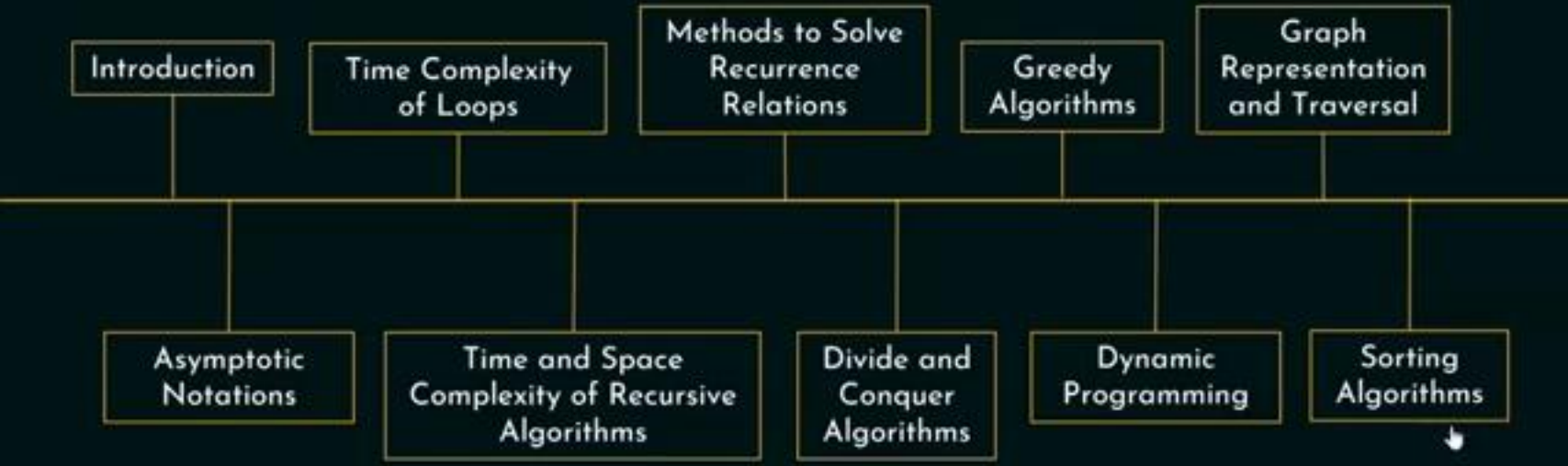
# Syllabus


Introduction
Time Complexity of Loops
Methods to Solve Recurrence Relations
Asymptotic Notations
Time and Space Complexity of Recursive Algorithms
Divide and Conquer Algorithms

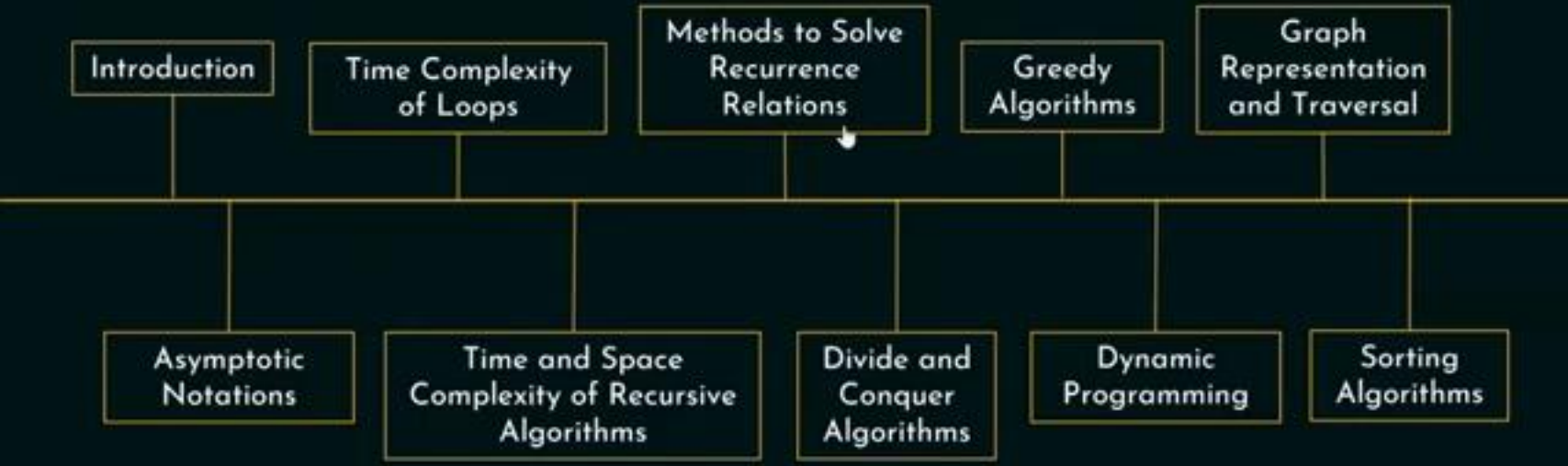
# Syllabus


Introduction
Time Complexity of Loops
Methods to Solve Recurrence Relations
Greedy Algorithms
Asymptotic Notations
Time and Space Complexity of Recursive Algorithms
Divide and Conquer Algorithms
Dynamic Programming

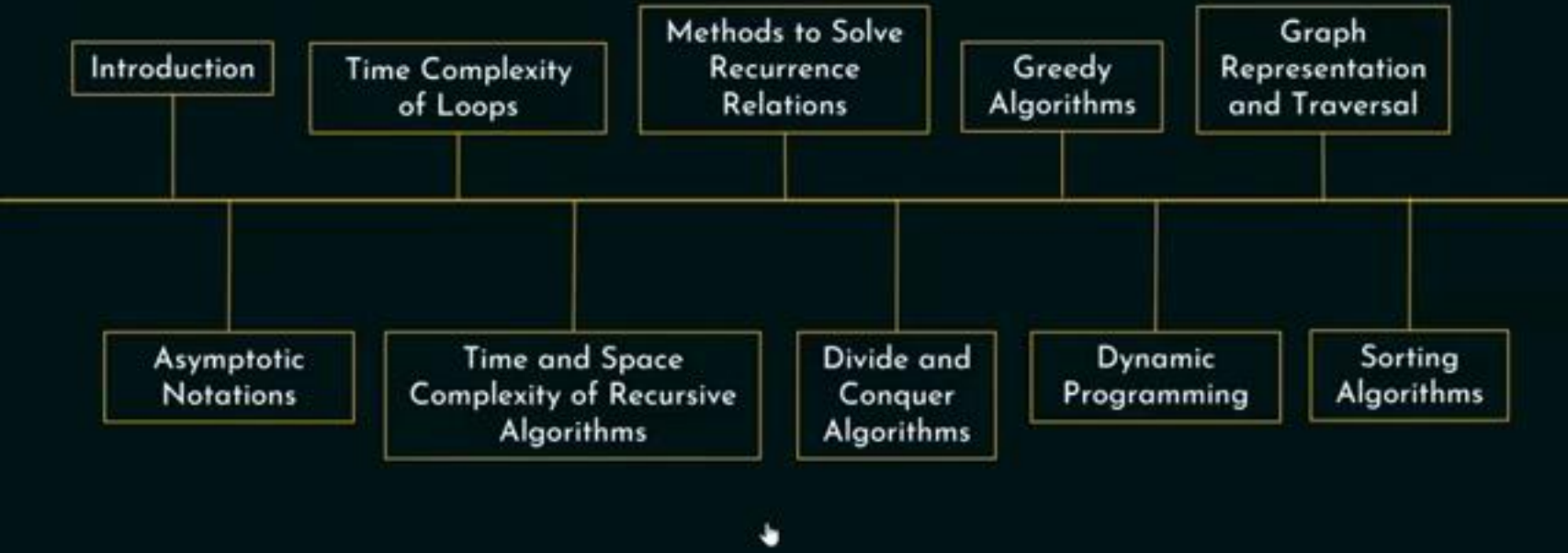
# Syllabus


Introduction
Time Complexity of Loops
Methods to Solve Recurrence Relations
Greedy Algorithms
Graph Representation and Traversal
Asymptotic Notations
Time and Space Complexity of Recursive Algorithms
Divide and Conquer Algorithms
Dynamic Programming
Sorting Algorithms

# Syllabus


Introduction
Time Complexity of Loops
Methods to Solve Recurrence Relations
Greedy Algorithms
Graph Representation and Traversal
Asymptotic Notations
Time and Space Complexity of Recursive Algorithms
Divide and Conquer Algorithms
Dynamic Programming
Sorting Algorithms

# Syllabus


Introduction
Time Complexity of Loops
Methods to Solve Recurrence Relations
Greedy Algorithms
Graph Representation and Traversal
Asymptotic Notations
Time and Space Complexity of Recursive Algorithms
Divide and Conquer Algorithms
Dynamic Programming
Sorting Algorithms

# Target Audience

- ✓ Students preparing for interviews and competitive exams (GATE, NET, etc.).

# Target Audience

- ✓ Students preparing for interviews and competitive exams (GATE, NET, etc.).

# Target Audience



- ✓ Students preparing for interviews and competitive exams (GATE, NET, etc.).
- ✓ Software developers, engineers, and tech enthusiasts.

# Target Audience

- ✓ Students preparing for interviews and competitive exams (GATE, NET, etc.).
- ✓ Software developers, engineers, and tech enthusiasts.
- ✓ Anyone interested in solving computational problems.

# Target Audience

- ✓ Students preparing for interviews and competitive exams (GATE, NET, etc.).
- ✓ Software developers, engineers, and tech enthusiasts.
- ✓ Anyone interested in solving computational problems.

# Target Audience

- ✓ Students preparing for interviews and competitive exams (GATE, NET, etc.).
- ✓ Software developers, engineers, and tech enthusiasts.
- ✓ Anyone interested in solving computational problems.

# Target Audience

- ✓ Students preparing for interviews and competitive exams (GATE, NET, etc.).
- ✓ Software developers, engineers, and tech enthusiasts.
- ✓ Anyone interested in solving computational problems.

# Target Audience

- ✓ Students preparing for interviews and competitive exams (GATE, NET, etc.).
- ✓ Software developers, engineers, and tech enthusiasts.
- ✓ Anyone interested in solving computational problems.

# Topics

- [x] What is an Algorithm?
- [x] Syllabus
- [x] Target Audience

# Topics

- [x] What is an Algorithm?
- [x] Syllabus
- [x] Target Audience


Thank you!


Get
Neso Academy
App

@nesoacademy

@nesoacademy

@nesoacademy