



Guru Gobind Singh Foundation's
Guru Gobind Singh College of
Engineering and Research Centre,
Nashik



Experiment No: 01

Write a program non-recursive and recursive program to calculate Fibonacci numbers and analyse their time and space complexity.

Student Name:

Class:

BE (Computer)

Div:

Batch:

Roll No.:

**Date of Attendance
(Performance):**

Date of Evaluation:

Marks (Grade)

A

P

W

T

Total

Attainment of CO

Marks out of 10

CO Mapped

CO4: Analyse performance of an algorithm.

CO5: Implement an algorithm that follows one of the following algorithm design strategies: divide and conquer, greedy, dynamic programming, backtracking, branch and bound.

**Signature of
Subject Teacher**



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Experiment No: 02

Write a program to solve a fractional Knapsack problem using a greedy method.

Student Name:

Class:

BE (Computer)

Div:

Batch:

Roll No.:

Date of Attendance
(Performance):

Date of Evaluation:

Marks (Grade)

A

P

W

T

Total

Attainment of CO

Marks out of 10

CO Mapped

CO4: Analyze performance of an algorithm.

CO5: Implement an algorithm that follows one of the following algorithm design strategies: divide and conquer, greedy, dynamic programming, backtracking, branch and bound.

Signature of
Subject Teacher



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Experiment No: 03

Write a program to solve a 0-1 Knapsack problem using dynamic programming or branch and bound strategy.

Student Name:

Class:

BE (Computer)

Div:

Batch:

Roll No.:

Date of Attendance
(Performance):

Date of Evaluation:

Marks (Grade)

A

P

W

T

Total

Attainment of CO

Marks out of 10

CO Mapped

CO4: Analyse performance of an algorithm.

CO5: Implement an algorithm that follows one of the following algorithm design strategies: divide and conquer, greedy, dynamic programming, backtracking, branch and bound..

Signature of
Subject Teacher



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Experiment No: 04

Design n-Queens matrix having first Queen placed. Use backtracking to place remaining Queens to generate the final n-queen's matrix.

Student Name:

Class:

BE (Computer)

Div:

Batch:

Roll No.:

Date of Attendance
(Performance):

Date of Evaluation:

Marks (Grade)

A

P

W

T

Total

Attainment of CO

Marks out of 10

CO Mapped

CO4: Analyse performance of an algorithm.

CO5: Implement an algorithm that follows one of the following algorithm design strategies: divide and conquer, greedy, dynamic programming, backtracking, branch and bound.

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Subject Teacher



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Experiment No: 05

Write a program for analysis of quick sort by using deterministic and randomized variant.

Student Name:

Class:

BE (Computer)

Div:

Batch:

Roll No.:

Date of Attendance
(Performance):

Date of Evaluation:

Marks (Grade)

A

P

W

T

Total

Attainment of CO



Marks out of 10

CO Mapped

CO4: Analyse performance of an algorithm.

CO5: Implement an algorithm that follows one of the following algorithm design strategies: divide and conquer, greedy, dynamic programming, backtracking, branch and bound.

Signature of
Subject Teacher

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Experiment No: 06					
<p>Mini Project - Write a program to implement matrix multiplication. Also implement multithreaded matrix multiplication with either one thread per row or one thread per cell. Analyze and compare their performance.</p>					
Student Name:					
Class:	BE (Computer)				
Div:		Batch:			
Roll No.:					
Date of Attendance (Performance):					
Date of Evaluation:					
Marks (Grade) Attainment of CO Marks out of 10	A	P	W	T	Total
CO Mapped	<p>CO4: Analyze performance of an algorithm.</p> <p>CO5: Implement an algorithm that follows one of the following algorithm design strategies: divide and conquer, greedy, dynamic programming, backtracking, branch and bound.</p>				
Signature of Subject Teacher					