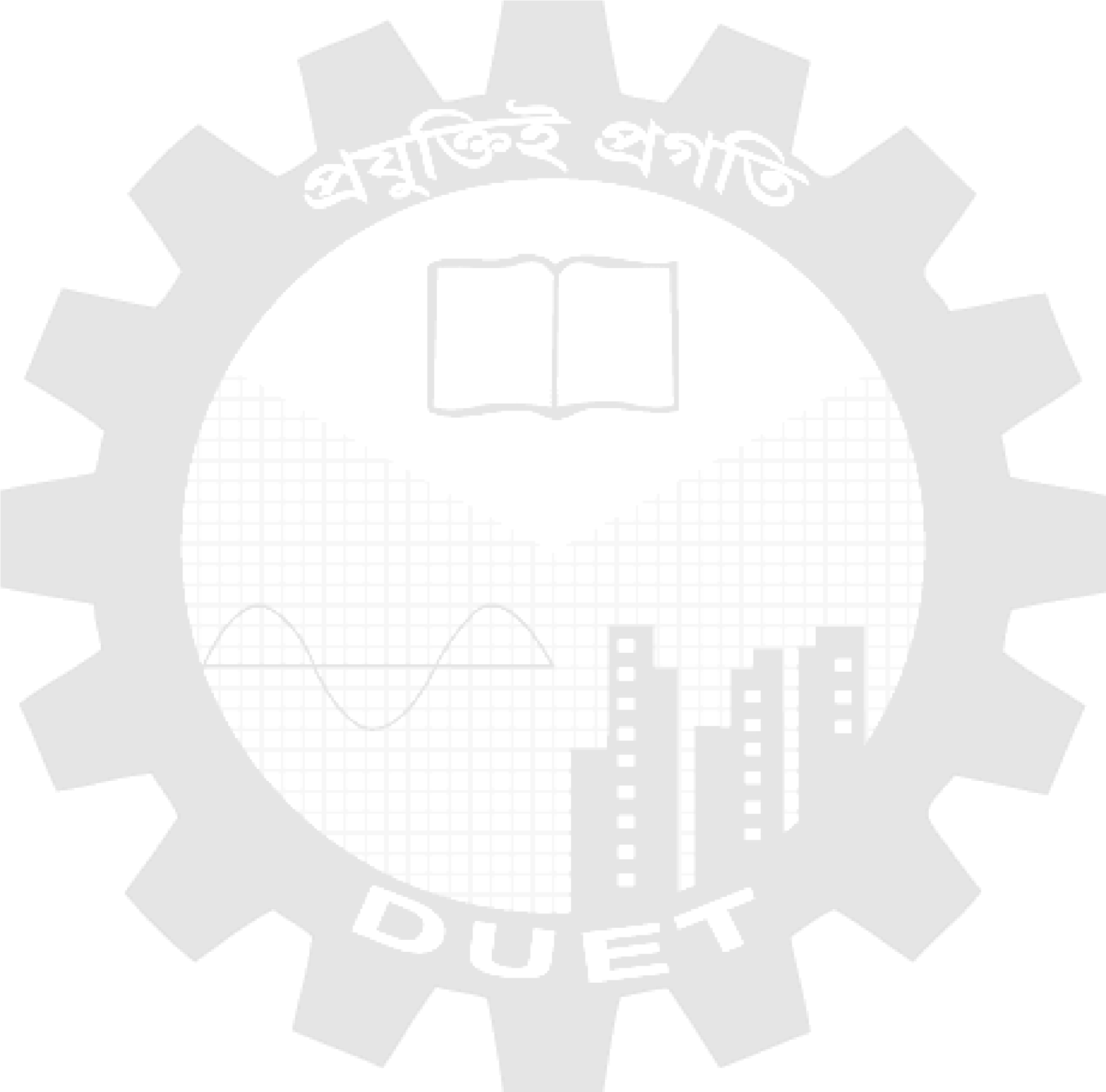
**Assignment No:**



**Dhaka**

**University of Engineering & Technology,**

**Gazipur**

**Department of**

**Computer Science and Engineering**

*Course*

*Code*

*:*

*CSE 3512*

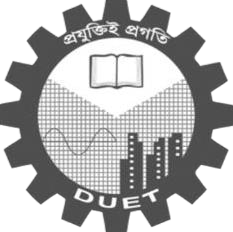
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*Title*

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*Algorithm Design and Analysis Sessional*



Date of Assignment:

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Date of Submission:

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**Assignment Name:**

1.

Given an infinite stream of integers, return the element representing the k

-

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largest

element in the stream. (Hint: Use Min

-

heap)

2

. Suppose a hospital's emergency room is filled with individuals of various ages. Sort

the patients efficiently so that the oldest patients receive care first. (Hint: Use Max

-

heap)

. You are given k sorted arrays, each containing n integers. Write a function that

3

efficiently merges these k sorted arrays into a single sorted array. (Hint: Use Min

-

heap)

**Submitted**

**To**

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**Submitted By**

Name:

ID:

Year/Semester: 3

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Section

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