

Don Bosco Institute of Technology, Kurla(W)
Department of Electronics and Tele-Communication Engineering
ECL304 - Skill Lab: C++ and Java Programming
Sem III
2021-22

Lab Number:	10
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Roll No :	40

Title:

1. Write a java program to implement Multiple Inheritance using Interfaces. Create an interface called Management with selectCandidate() method. Another interface called Department with allotSubject() method. Class called HOD will implements these two interfaces and define the methods and access them with valid objects.

Learning Objective:

Students will be able to implement multiple inheritance using Interface concepts

Learning Outcome:

- Understanding the abstraction concept and hiding of the unnecessary code using interfaces.

Course Outcome:

ECL304.4	1. Implement different programming applications using packaging.
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Theory:

- What is complete abstraction and how is it achieved in JAVA?

Data abstraction is a method where essential elements are displayed to the user and trivial elements are kept hidden.

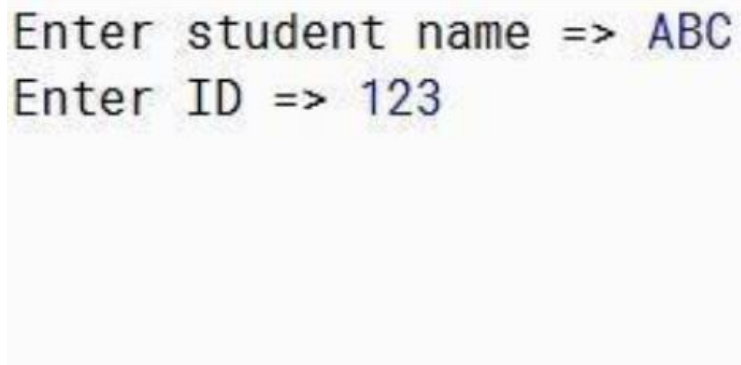
In Java, abstraction is achieved by using the abstract keyword for classes and interfaces. In abstract classes, we can have abstract methods as well as concrete methods.

- Explain multiple abstraction and how is it performed in Java?

Abstraction is the concept of object-oriented programming that “shows” only essential attributes and “hides” unnecessary information. The main purpose of abstraction is hiding the unnecessary details from the users. Abstraction is selecting data from a larger pool to show only relevant details of the object to the user. It helps in reducing programming complexity and efforts. It is one of the most important concepts of OOPs.

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Q1)

A screenshot of a C++ program's input phase. It shows a text-based interface where the user is prompted to enter a student name and ID. The first prompt is "Enter student name =>" followed by the input "ABC". The second prompt is "Enter ID =>" followed by the input "123". The background is a light gray, and the text is in a monospaced font.

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Enter student name => ABC
Enter ID => 123
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