SNS COLLEGE OF TECHNOLOGY

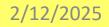## Coimbatore-35.
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade (Cycle III)
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING
COURSE CODE & NAME : 23CST205 - Object Oriented Programming Using Java

II YEAR/ III SEMESTER

UNIT – I INTRODUCTION TO OOP

Topic: Polymorphism

Polymorphism

- Polymorphism is considered one of the important features of Object-Oriented Programming.

- Polymorphism allows us to perform a single action in different ways.

- In other words, polymorphism allows you to define one interface and have multiple implementations.

- The word "poly" means many and "morphs" means forms, So it means many forms.

Example

A person at the same time can have different characteristics. Like a man at the same time is a father, a husband, and an employee.

So the same person possesses different behaviors in different situations. This is called polymorphism.

Polymorphism

- **Types of Java Polymorphism**

- Compile-time Polymorphism

- Runtime Polymorphism

Polymorphism

- Example 1:

    We can take a boy as a real-world example. This boy can be a student, a player, and a writer. So that this boy can exist in different ways in different situations.
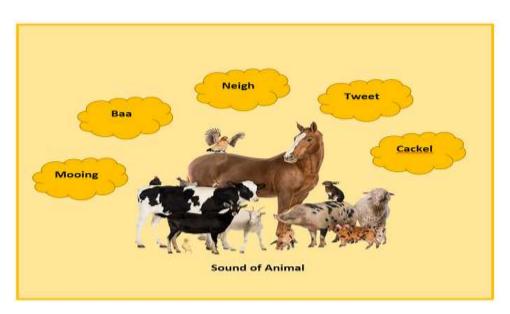

Polymorphism/23CST205 - Object Oriented Programming Using Java/Sumathi.B / AP / MCA/SNSCT

Polymorphism

- Example 2:

    Sound of animals. People have the same sound but different animals make different sounds. The following diagram shows few different sounds make by animals.