



# 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

- 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.





