Titolo della Slide

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing

- Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.
- Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.
- Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

Why Python?

Modern Programming Language

- Easy to learn and read
- Versatile for web, data science, Al
- Large community and ecosystem
- Cross-platform compatibility
- Excellent documentation

Core Features

What Makes Python Special

- Dynamic typing for flexibility
- Object-oriented programming support
- Functional programming capabilities
- Extensive standard library
- Third-party package ecosystem

Data Types

Python Built-in Types

- Integers and floating-point numbers
- Strings for text manipulation
- Lists for ordered collections
- Dictionaries for key-value pairs
- Sets for unique elements
- Tuples for immutable sequences

Control Flow

Making Decisions in Code

- if/elif/else statements
- for loops for iteration
- while loops for conditions
- break and continue keywords
- List comprehensions
- Generator expressions

List Comprehension Example

Elegant and Pythonic

Mathematical Foundations

Time Complexity Analysis

The time complexity of common algorithms:

Functions

Reusable Code Blocks

- Function definition with def
- Parameters and arguments
- Return values
- Default parameters
- *args and **kwargs
- Lambda functions

Function Example

Decorators and Closures

Statistics & Probability

Essential Formulas

Key statistical measures used in data science:

Python Program Flow

Basic Execution Model

Data Processing Pipeline

ETL Workflow

Object-Oriented Hierarchy

Class Inheritance Structure

Thank You

Start Your Python Journey Today

- Practice regularly
- Build real projects
- Join the community
- Never stop learning
- Share your knowledge