# 25 Lecture - CS304

# **Important Subjective**

#### What is overloading and overriding in object-oriented programming? Answer: Overloading refers to creating multiple functions with the same name but different parameters, while overriding refers to redefining a function in a subclass that was originally defined in a superclass.

## What is the difference between overloading and overriding?

Answer: Overloading is creating multiple functions with the same name but different parameters, while overriding is redefining a function in a subclass that was originally defined in a superclass.

#### What is the purpose of overloading in object-oriented programming?

Answer: Overloading allows a function to perform different tasks based on the parameters it is called with.

#### What is the purpose of overriding in object-oriented programming?

Answer: Overriding allows a subclass to provide a different implementation of a function defined in the superclass.

#### Is overloading static or dynamic polymorphism?

Answer: Overloading is an example of static polymorphism.

#### Is overriding static or dynamic polymorphism?

Answer: Overriding is an example of dynamic polymorphism.

#### Can overloaded functions have different return types?

Answer: Yes, overloaded functions can have different return types as long as their parameter lists differ.

#### Can overridden functions have different return types?

Answer: No, overridden functions must have the same return type as the function they are overriding.

#### Can overloaded functions have different access modifiers?

Answer: Yes, overloaded functions can have different access modifiers.

### Can overridden functions have different access modifiers?

Answer: No, overridden functions must have the same access modifier as the function they are overriding.