**Abstract class mein super() ki zaroorat hoti hai ya nahi?"**

Pehle yeh samjho: super() kya karta hai?

super().\_\_init\_\_()

Yeh line parent class ka constructor call karti hai — yaani agar child class kuch extra kaam kar rahi hai, to super() se pehle parent class ka setup bhi ho jata hai.

🔧 Abstract class kya hoti hai?

|  |
| --- |
| from abc import ABC, abstractmethod  class Animal(ABC):  def \_\_init\_\_(self):  print("Animal created!")  @abstractmethod  def make\_sound(self):  pass |

Yeh ek **abstract class** hai. Animal class ka make\_sound() method **abstract** hai, yaani koi child class jab tak isay **implement nahi karegi**, wo class complete nahi hogi.

**✅ Jab super() kaam aata hai:**

**🧪 Example:**

|  |
| --- |
| from abc import ABC, abstractmethod  class Animal(ABC):  def \_\_init\_\_(self):  print("Animal constructor called")  @abstractmethod  def make\_sound(self):  pass  class Dog(Animal):  def \_\_init\_\_(self):  super().\_\_init\_\_() # 👈 Yahan parent ka constructor call kiya  print("Dog constructor called")  def make\_sound(self):  print("Bark!") |

|  |
| --- |
| Animal constructor called  Dog constructor called |

### 💡 Tashreeh:

* Dog ne jab super().\_\_init\_\_() use kiya to Animal ka constructor bhi chala.
* Agar super() na lagate, to Animal ka constructor skip ho jata.
* **To agar parent class (abstract ya normal) kuch important setup kar rahi hai, to super() zaroori hai.**

## ❌ Jab super() ki zarurat ****nahi hoti****:

Agar tumhari **abstract class ka constructor kuch bhi nahi kar raha**, to super() lagana **optional** hota hai.

### 🎯 Example:

|  |
| --- |
| from abc import ABC, abstractmethod  class Animal(ABC):  @abstractmethod  def make\_sound(self):  pass  class Cat(Animal):  def make\_sound(self):  print("Meow") |

Yahan Animal ka constructor hai hi nahi, is liye Cat class mein super() ki zaroorat nahi.

## 🤔 Viva Question jese jawab:

**Q: Kya abstract class mein super() lagana zaroori hota hai?**

✅ **Answer:**

Nahi, hamesha zaroori nahi hota. Agar abstract class ka constructor koi kaam kar raha ho — jaise variables set karna ya logging — to child class mein super().\_\_init\_\_() lagana chahiye taake wo kaam bhi ho jaye. Lekin agar abstract class ka constructor empty ho, to super() lagana optional hai.