

## CONSTRUCTORS AND DESTRUCTORS

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Learned about two key aspects in C++: constructors and destructors. Constructors act as special instructions to prepare for creating something new, while destructors handle the cleanup after usage. Discovered ways to adjust constructors for proper setup during creation and saw how destructors tidy up afterward. Through various exercises, understood how constructors and destructors collaborate to create and tidy up in C++ programs. This lab provided insights into starting things correctly and ensuring proper closure when dealing with objects in C++ classes.

Explored three types of constructors in C++:

1. **Default Constructor:** Discovered the default constructor, which requires no parameters. This constructor initializes objects without any specific values, providing a basic setup for new objects.
2. **Copy Constructor:** Explored the copy constructor, a default constructor that creates a new object by copying the values of an existing object of the same class. It ensures accurate replication of object attributes.
3. **Parameterized Constructor:** Learned about parameterized constructors, which accept parameters during object creation. These constructors facilitate setting initial values based on provided parameters, allowing customization during object instantiation.

### CODE NOTES:

The constructor serves to initialize the object and emits a message upon the object's creation. Conversely, the destructor manages cleanup or finalization tasks and triggers a message when the object is deleted. Running this program will display notifications indicating the creation and deletion times of the object. Destructors prove particularly useful in situations involving dynamic memory allocation or resource management, ensuring proper cleanup when an object becomes obsolete.