**ASSIGNMENT NO: 02**

**Problem Statement:** Develop an object oriented program in C++ to create a database of student information systems containing the following information: Name, Roll number, Class, division, Date of Birth, Aadhar number, Blood group, Contact address, telephone number, etc .

Write the code to illustrate the use of default constructor, parametrized constructor, copy constructor and destructor.

**Objectives:**

1. To learn concepts of constructors and destructors in C++
2. To learn about the invocation and execution of constructors and destructors in C++

**Theory:**

**Explain**

* + **Default constructor**
  + **Parametrized constructor**
  + **Copy constructor**
  + **Destructor.**

# Algorithm:

1. START.
2. Create a student class.
3. Create a default constructor.
4. Create a parametrized constructor and a copy constructor.
5. Create a destructor.
6. Define accept and display member functions of class.
7. Display the student database.
8. STOP

# Platform: 64 –bit Open source Linux

**Input:** Student Information: Name, Roll number, Class, division, Date of Birth, Adhar number, Blood group, Contact address, telephone number.

**Output:** Student Database containing Name, Roll number, Class, division, Date of Birth, Adhar number, Blood group, Contact address, telephone number. Type of constructor being called and the destructor being called.

**Conclusion:** Hence, learnt to use constructors and destructors in C++**.**

**FAQs:**

1. What is the order of constructor execution in C++?
2. How do constructors and destructors manage dynamic memory allocation?
3. What is the significance of the copy constructor in C++?
4. How does C++ handle default initialization if no constructor is provided?