**Lab – 4**

Constructor, destructors, dynamic memory management, friend function

1. Write a program in C++ to implement various constructors (a) No argument (b) one argument (2) two arguments (3) copy constructor
2. Write a program to implement (a) Constructors with default arguments (b) destructor.
3. Verify the following about *destructor* by writing the program:
4. Name should begin with tilde sign(~) and must match class name.
5. There cannot be more than one destructor in a class.
6. Destructors do not allow any parameter.
7. They do not have any return type, just like constructors.

When you do not specify any destructor in a class, compiler generates a default destructor and inserts it into your code.

1. Write a program to implement (a) pointer to an objects (b) this pointer. Practice both ‘.’ (dot operator) and ‘->’ (arrow operator).
2. How would you implement dynamic memory allocation? Use *new* and *delete* keywords.
3. Implement array of pointers to the objects in C++.
4. Write a program to implement Static objects.
5. Understand the meaning of *friend* keyword and implement (a) Friend function (b) Friend class.