Agenda

- Revision
- Template
- STL
- Nested class, local class

Lab Exam (demo01)

- 40 Marks
- Programming questions 1 or 2
- Marks distribution for every functunality
- Menu driven code
- Also few marks reserved for comments, multiple file, naming convention

Template

- 1. function (demo01)
- 2. class

class template (demo02 to demo05)

STL (STANDARD TEMPLATE LIBRARY)

- It is library of template classes.
- It consists of 4 components
  - 1. Algorithm
  - 2. Container
  - 3. Function Objects
  - 4. Iterators

vector (demo06 and demo07)

- it is a dynamic array
- functions inside tthis vector class ->
  - push_back()-> to add the element inside the vector
  - pop_back() -> to remove the element from the vector
  - size() -> to get the no of elements in the vector
  - erase() -> to delete the element from specified position
  - insert() -> to insert the element at specified position
  - begin() -> gives an iterator object that points at 1st element in the vector
  - end() -> gives an iterator object that points at past the last element in the vector

Local class (demo08)

- A class defined inside a function is called as local class.
- We cannot cretae object of the local class outside the function

- We cannot access local varaibles of the enclosing function inside local classes
- We can access gloabl varaibles inside local classes
- We can access static local varaibles of the enclosing function inside local classes

Nested class (demo09)

- A class defined inside another class is called as nested class.
- We can cretae object of the nested class outside the outer class by using name of the outer class, scope resolution operator and name of the nested class.
- We cannot access priavte members of the outer class directly inside the nested class, however we can access them using the outer class object
- we can access the static data member of the outer class directly inside the nested class

Lab work

- STL demo
- assignemnt on template class stack ()
- Complete the exception handling assignments
- implement the assignemnt9 Q2 with vector
- Nested and local class at the last.