

Software Development Lab – II [15B17CI271]

Assignment Sheet

Week 12

COURSE OUTCOMES		COGNITIVE LEVELS
C173.1	Write programs in C++ to implement OOPs concepts related to objects, classes, constructor, destructor, and friend function.	Apply Level (Level 3)
C173.2	Write programs in C++ using OOPs concept like encapsulation, inheritance, polymorphism and abstraction.	Apply Level (Level 3)
C173.3	Write programs in C++ using Standard Template Library.	Apply Level (Level 3)
C173.4	Perform exception handling in C++ programs.	Apply Level (Level 3)
C173.5	Write MySQL queries to perform operations like ADD, DELETE, UPDATE, SELECT on relational databases.	Apply Level (Level 3)

1. Create a map named Students where the keys will be integers (RollNo), and the values will be strings (Name). Insert values into the map Students. A key of 200 and a value of Alice will be inserted into the map. Insert values into the map Students. A key of 201 and a value of John will be inserted into the map. Use the size() function to get the size of the map named Students. Use a for loop to create an iterator named it to iterate over the elements of the map named Students. Print the values of the map Students on the console.
2. Create a map named m where the keys will be integers, and the values will be integers. Three entries have been made into the map. Insert a new entry into the map m. A key of 5 and a value of 6 will be inserted into the map. You can enter items into std::map using the insert() function. Remember that the std::map keys must be unique. So, it first checks whether each key is present in the map. If it's present, the entry will not be inserted, but it returns the iterator for the existing entry. If it's not present, the entry is inserted. Use the insert_or_assign() function to insert or modify an existing entry. Use a for loop to create an iterator named itr to iterate over the elements of the map named m. Print the values of the map m on the console.
3. Create a map named Students whose keys will be integers and values strings. Insert values into the map Students. A key of 200 and a value of Alice will be inserted into the map. Insert values into the map Students. A key of 201 and a value of John will be inserted into the map. You can use the find() function to search for elements in a map by their keys. If the key isn't found, the function returns std::map::end. Otherwise, an iterator of the searched element will be returned. Look for the value associated with a key of 201. Use an if statement to

check whether the value for the key is found. Print the value of the key alongside some text on the console.

4. Create a map named my_map whose keys will be strings and values integers. Insert values into the map my_map. A key of Cow and a value of 1 will be inserted into the map. Insert values into the map my_map. A key of Cat and a value of 2 will be inserted into the map. Add a value 3 into the map my_map with a key of a lion. Create an iterator to iterate over the map my_map looking for the key cat. You can use the erase() function to delete a value from a map. You simply create an iterator that points to the element to be deleted. The iterator is then passed to the erase() function. Delete the element pointed to by the iterator. Use an iterator to iterate over the elements of the map my_map from the start to the end. Print out the contents of the map my_map on the console.
5. WAP in C++ to store the information entered by the user into the file.
6. WAP in C++ to Retrieve information from the file which is entered in Q5.
7. WAP in C++ to Copy Content of One File to Another. You have to ask from user to enter the name of source file (with extension) and target file (with extension).
8. Write a program in C++ that merges the content of two files into the third file. To merge two files in C++ programming, you have to ask from user to enter the name of all the three files with extension
9. write a program in C++ that deletes a file from the current directory. To delete any file from the current directory, you have to ask from user to enter the name of file first and then perform the operation of deleting it from the directory.
10. WAP in C++ which opens a file in reading and writing mode. After writing information inputted by the user to a file named afile.dat, the program reads information from the file and outputs it onto the screen.