* Assignment 6 4

Title: - Personal Information system using Sorting and searching for STL and veda Container:

problem Statement:

corite a CFF program using STC Jor sorting and searching uses defined record such as pasonal records using vector container.

corite ctt program using st L for 80sting and searching user defined records such as Item seconds (Item Code, name, Cost etc) using vector. Container.

Prerequites! - objet oriented programming.

objective: -

To the learn the concept of STL, searching Sorting and vector container.

Theory! -

sti:- the standard Template library is q set of c++ template classes to provide common programming data structures and function such as list, startes, array etc. It is a library of Container, classes, algorithm and iterators. It is a generalized library and so it Components are param eterized. A working knowledge of template classes is a prerequisites for working with STL.

STL has four components.

Higosithms.

- sorting
 - Searching
 - Numbri
 - partition operation etc.

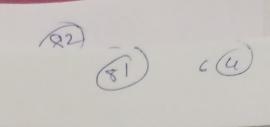
Containers :-

- sequence containers vector, list, orray etc.
- Container adaptors- queue, stack, etc.
- passociative container set, multiset map, multimap.
- Associative o unordered Container-unordered
- set un ordered multiset, un ordered map.

functions -

- The STI includes classes that overload the functions (all operators. Instances of such classes are called Junction objects or lunders. functors allows the working of associated functions to be with the help of parameter to be passed.
- B Iterators'- By the name 8499 st, iterators are used for working upon a sequence of value they are the major features that allows generality in STL.

atility library.
Define in header 2 letility) Sorting: It is one of the most basis functions applied to dates. It means arranging the data in a particular jashion which can be increasing or decreasing. There is a built in untion in (++ STL by the name of sort 1). This junction. intenally use Intrasort Faulities: - linux operating 8ystem, Gett Algorithm. D'aire a header lile to use veder. & (reate a vector paming personal records. @ Initilize variables to store name, bisth data and telephone number. 5) Using iterator store as many records
you want to store using preduined function 6) Create another vector item-records & Initialize Variable to 8 toxe Item (ode. item name, quantity and cost & using sterators and predefined functions, During predefined function sort (), sort the data, stored according to the requirement.



@ lesing predegined junction seach, seach The element from the vedor the user wants to check. Ti) Display and the junctions using a

menu.

(2) stop.

Tondusion: - Hence, we have guccessfully how it makes data structure easy.