

LAB B

Practice Lab

1. Write a program using exception handling to implement following details:
 - a) Create a class DM with data members centi-meters and milli-meter. Create a parameterized constructor to initialize the values of the data members. If the value of centi-meters entered by the user is >100 and if the value of milli-meters >1000 , then throw an exception and print the appropriate message for both the cases.
 - b) Convert the distance in centi-meters and milli-meters to inches. 1 inch = 25.4 mm 1 inch = 2.54 cms If the computed distance in inches is greater than 2000, then throw an exception and display a message "Distance cannot be covered".
2. Create a class template Mat with one type T argument and two int arguments. This class template will have one two-dimensional array of any datatype which will represent the matrix of given rows and columns. This class should contain the following member functions:
 - a) Generic functions to enter the elements of the matrix and display it.
 - b) A generic function to swap maximum numbers with minimum numbers.
 - c) A generic function to count the number of elements greater than 10. In a main function, create matrix of integers and matrix of floating points using the Mat template class and check all the functionalities