**CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY**

**DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY & RESEARCH**

Department of Computer Engineering/Computer Science & Engineering/ Information Technology

**Subject Name: Object Oriented Programming with C++**

**Semester: II**

**Subject Code: CE144**

**Academic year: 2020-21**

|  |  |
| --- | --- |
| **No.** | **Aim of the Practical** |
| **20.** | **Create a class LAND having data members: length, width, area1. Write member functions to read and display the data of land. Also, calculates the area of the land. Create another class TILES having data members: l, w, area2. Write a member function to get the data of tile. Calculate the area of one tile. Class TILE has a member function named number\_of\_tiles() which is a friend of class LAND and takes the object of class LAND by reference which calculates the number of tiles which can be put over the land area. Write the main function to test all the functions. Use the concept of member function of one class can be a friend function of another class.**  **PROGRAM CODE :**  #include <iostream>  using namespace std;  class land  {  public:  int w1, l1, a1;  void getdata()  {  cout << endl  << "Enter width & length: " << endl;  cin >> w1 >> l1;  a1 = w1 \* l1;  }  void putdata()  {  cout << w1 << " " << l1 << " " << a1;  }  friend void number\_of\_titles();  } l;  class tiles  {  public:  int w2, l2, a2;  void getdata()  {  cout << endl  << "Enter the width & length of tiles: " << endl;  cin >> w2 >> l2;  a2 = w2 \* l2;  }  void putdata()  {  cout << w2 << " " << l2 << " " << a2 << endl;  }  friend void number\_of\_tiles();  } t;  void number\_of\_tiles(land &l, tiles &t)  {  int n;  n = (l.a1) / (t.a2);  cout << endl  << "Tiles taken for LAND area is: " << n;  }  int main()  {  l.getdata();  l.putdata();  t.getdata();  t.putdata();  number\_of\_tiles(l, t);  }  **OUTPUT:**    **CONCLUSION:** In this practical we learnt how to use member function of one class can be a friend function of another class in c++ . |