**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**

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| **No.** | **Aim of the Practical** |
| **18.** | **Define a class *Fahrenheit* with float temp as data member. Define another class *Celsius* with float temperature as data member. Both classes have member functions to input and print data. Write a non-member function that receives objects of both the classes and declare which one is higher than another according to their values. Also define main() to test the function. Define all member functions outside the class. (Formula for converting Celsius to Fahrenheit is F = (9C/5) + 32). Use the concept of friend function.**  **PROGRAM CODE :**  #include <iostream>  using namespace std;  class c;  class f  {  private:  float temp;  public:  void getdata();  friend void compare(f, c);  } f1;  class c  {  private:  float temperature;  public:  void data();  friend void compare(f, c);  } c1;  void f::getdata()  {  cout << endl  << "Enter Temperature in F: ";  cin >> temp;  }  void c::data()  {  cout << endl  << "Enter Temperature in C: ";  cin >> temperature;  }  void compare(f f1, c c1)  {  float f;  f = (9 \* c1.temperature) / 5 + 32;  cout << "Cal. F: " << f;  if (f > f1.temp)  {  cout << endl  << "C's F is greater than actual F";  }  else  {  cout << endl  << "C's F is not greater than actual F";  }  }  int main()  {  f1.getdata();  c1.data();  compare(f1, c1);  }  **OUTPUT:**    **CONCLUSION:** In this Practical we learnt how to use the concept of friend function in c++ . |