**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**

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| **No.** | **Aim of the Practical** |
| **10.** | **Define three functions named divide(). First function takes numerator and denominator as an input argument and checks it’s divisible or not, Second function takes one int number as input argument and checks whether the number is prime or not and Third function takes 3 float number as argument and finds out average of the numbers. Use concept of Function Overloading / static binding.**  **PROGRAM CODE :**  #include <iostream>  using namespace std;  int divide(int a, int b);  int divide(int a);  float divide(float a, float b, float c);  int main()  {  int a, b;  cout << "enter a and b where a is numerator and b is denominator : " << endl;  cin >> a >> b;  if (divide(a, b))  cout << "divisible" << endl;  else  cout << "not divisible" << endl;  int p;  cout << endl;  cout << "enter a number to check number prime or not:" << endl;  cin >> p;  if (divide(p))  cout << "number is a prime" << endl;  else  cout << "number is not prime" << endl;  float m, n, o, avg;  cout << endl;  cout << "enter three numbers to find average: " << endl;  cin >> m >> n >> o;  avg = divide(m, n, o);  cout << "average is:" << avg << endl;  }  int divide(int a, int b)  {  if (a % b == 0)  return 1;  else  return 0;  }  int divide(int a)  {  int count = 0, i;  for (i = 2; i <= a; i++)  {  if (a % i == 0)  count++;  }  if (count == 1)  return 1;  else  return 0;  }  float divide(float a, float b, float c)  {  return ((a + b + c) / 3);  }  **OUTPUT:**    **CONCLUSION:** In this practical we learn about function overloading. And it means same function name can be defined more than one time with different types of argument to perform same or different tasks is called function overloading. |