

Software Development Fundamentals-II (15B11CI211)

Tutorial-10 [CO110.5] [CO110.6]

Topic - Basics of OOP and C++

1. Write five differences between Procedural languages and object oriented languages, with examples.
2. What are the benefits of using C++ over C language? Define characteristics of object oriented programming.
3. List the types of inheritance supported in C++.
4. What is an inline function?
5. What is a pure virtual function and an abstract class?
6. What is a friend class and a friend function?
7. Which is the correct pure virtual function definition:

A - virtual void f()=0 { }

B - void virtual f()=0 { }

C - virtual void f() {} = 0;

D - None of the above.
8. Which of the following operator cannot be overloaded:

A - / B - () C - :: D - %
9. Write a C++ program to display the skills of a person according to his/her profession using inheritance.
10. Write a C++ program to read and print employee information using multiple inheritance.
11. Write a C++ program to read time in seconds and convert in time format (HH:MM:SS).
12. Write a C++ program to count the no. of objects created for a class using static member function.
13. Write a C++ program to find the winner of an election based on received votes and no. of candidates.
14. Write a C++ program to calculate the sum of the digits of a number.
15. Write a C++ program to find volume of cube, cylinder and sphere using function overloading.
16. Write a C++ program to add two objects using binary plus (+) operator overloading.