

Assignment-3

Objective:

The objective of this assignment is to learn **Polymorphism & Inheritance**.

1. Create a class and test if method overloading holds good for return type of method or not.
2. Write a java program to overload three methods named with addition() having different parameters.
3. Write a java program to overload the constructor named with Addition() having different parameters.
4. Overload the constructors for class Box for cube and cone and also display its volume.
5. Do the problem 4 for method overloading.
6. Create a class Student containing instance variables roll and name and a parameterized constructor. Create two objects of that class from the main class and print them (Hints: Override toString method of Object class).
7. Create a class EMP having instance variable name and id. Create its subclass (say Scientist) which has instance variable no_of_publication and experience. Now create its subclass, say Dscientist which has instance variable award. Put a method: public String toString () { } in every class where you describe about the class and from main create object of each class and print each object.
8. Create a class with a method void show () and make 3 subclasses of it and all subclasses have void show () method overridden and call those methods using their class references.
9. Do the problem 8 using dynamic method dispatching