

Q: Create a class named Student and a class named Main, which will have your main() method. Then do the following tasks:

1. Update the Student class :
  - i) Add 3 variables - Name(String), ID(int) and CGPA(double).
  - ii) Create a constructor taking all 3 variables as parameters.
  - iii) Implement the toString() method to print the details of the Student object (show all 3 variables)
  - iv) Implement the Comparable interface and implement the compareTo() method on the basis of ID
2.
  - i) In the main() method of the Main class, create 5 Student objects with IDs 1,2,3,4,5 and with unique Name and CGPA for each account.
  - ii) Create an ArrayList of Students and add all the 5 objects into the list.
  - iii) Use the Collections.sort() method to sort the ArrayList and print the List
  - iv) Create a Comparator to compare the Student objects on the basis of Name and use Collections.sort() method to sort the ArrayList again and print the List.
3.
  - i) Write the 5 Student objects you have created in a text file - you must write the entire object in the file.
  - ii) Create 5 new Student references, read the objects that you have written in the file and save them in the new Student references. Print the new Student objects to show that you have properly read the objects.