```
Import java.util.ArrayList;
Import java.util.Collections;
Import java.util.Comparator;
Import java.util.List;



// Define a Student class to represent a student

Class Student {

   String name;

   String rollNumber;

   Double cgpa;



   Public Student(String name, String rollNumber, double cgpa) {

      This.name = name;

      This.rollNumber = rollNumber;

      This.cgpa = cgpa;

   }
```

```
}



Public class Main {

    // Comparator to compare students based on CGPA in descending order

    Static class CGPAComparator implements Comparator<Student> {

        @Override

        Public int compare(Student student1, Student student2) {

            // Sort in descending order of CGPA

            Return Double.compare(student2.cgpa, student1.cgpa);

        }

    }



    // Function to sort a list of student objects based on CGPA in descending order

    Static void sortStudents(List<Student> students) {

        // Use the CGPAComparator to sort the list
```

```
    Collections.sort(students, new CGPAComparator());

}



Public static void main(String[] args) {

    // Create a list of student objects

    List<Student> students = new ArrayList<>();

    Students.add(new Student(“Alice”, “A123”, 3.8));

    Students.add(new Student(“Bob”, “B456”, 3.5));

    Students.add(new Student(“Charlie”, “C789”, 3.9));

    Students.add(new Student(“David”, “D101”, 3.2));

    Students.add(new Student(“Eve”, “E202”, 4.0));



    // Sort the list of students based on CGPA

    sortStudents(students);
```

```
        // Print the sorted list

        System.out.println("Sorted List of Students by CGPA (Descending Order):");

        For (Student student : students) {

            System.out.println("Name: " + student.name + ", Roll Number: " + student.rollNumber + ", CGPA: "
+ student.cgpa);

        }
}
}
```