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);

}

}

}