**Solution Lab 11**

**import** java.util.Scanner;

**public** **class** CourseManager1 {

 **public** **static** **void** main(String[] args) {

 Scanner input = **new** Scanner(System.***in***);

 System.***out***.print("Enter number of students: ");

 **int** numOfStudents = input.nextInt();

 **while** (numOfStudents < 1){

 System.***out***.print("Number of students is invalid. Enter number of students: ");

 numOfStudents = input.nextInt();

 }

 **double**[] scores = **new** **double**[numOfStudents];

 System.***out***.print("Please enter students' scores: ");

 **for** (**int** i = 0; i < scores.length; i++){

 **double** score = input.nextDouble();

 **if** (score >= 0 && score <= 100){

 scores[i] = score;

 }

 **else** {

 System.***out***.println("The score " + score + " you entered is wrong. Program will store score 0.");

 }

 }

 System.***out***.print("The scores are: ");

 **for** (**int** i = 0; i < scores.length; i++){

 System.***out***.print(scores[i] + " ");

 }

 System.***out***.println();

 }

}

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**import** java.util.Scanner;

**public** **class** CourseMan2 {

 **public** **static** **void** main(String[] args) {

 // **TODO** Auto-generated method stub

 Scanner input = **new** Scanner(System.***in***);

 System.***out***.println("Enter number of students");

 **int** numofstudents = input.nextInt();

 **while**(numofstudents<1){

 System.***out***.println("Number of students are invalid, please enter >0");

 numofstudents = input.nextInt();

 }

 **double** scores[] = **new** **double** [numofstudents];

 System.***out***.println("Please enter student score:");

 **for** (**int** i=0; i<scores.length; i++){

 **double** score= input.nextDouble();

 **if**(score>=0 && score<=100){

 scores[i]=score;

 }

 **else**

 {

 System.***out***.println("The score" +score+ "you enetered is wrong. program will store score as 0");

 }

 }

 **char**[] grades = *scoreToGrade*(scores);

 System.***out***.println("The scores/grades are ");

 **for**(**int** i=0;i<scores.length; i++){

 System.***out***.println(scores[i] +"/" +grades[i] + "");

 }

 System.***out***.println();

 }

 **public** **static** **char** [] scoreToGrade (**double** scores[]){

 **char** grades []= **new** **char**[scores.length];

 **for**(**int** i=0; i<scores.length; i++){

 **if**(scores[i]>=90)

 grades[i] = 'A';

 **else** **if**(scores[i]>=80)

 grades[i] = 'B';

 **else** **if**(scores[i]>=70)

 grades[i] = 'C';

 **else** **if**(scores[i]>=60)

 grades[i] = 'D';

 **else**

 grades[i] = 'F';

 }

 **return** grades;

 }

}