
**THE STATE UNIVERSITY OF ZANZIBAR**

**SCHOOL OF SOCIAL AND NATURAL SCIENCE**

**DEPARTMENT OF SOCIAL SCIENCE**

**TUNGUU CAMPUS**

**COURSE CODE: INF 21O5**

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**REGISTRATION NO: BITAM/9/21/018/TZ**

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QUESTION:1

```
import java.util.Scanner;

class Student { String
regNo; String name;
float cgpa;
String programName;
String schoolName;
String proctorName;
}



import java.util.Scanner; public class Main {
public static void main(String[] args)  {
Scanner AM = new Scanner(System.in) ;
System.out.print("Enter  number of students: ") ; int n =
AM.nextInt() ;

Student[] students = new Student[n] ;
AM.nextLine();

for (int i = 0; i < n; i++) { students[i] = new
Student() ;

System.out.print("Enter student reg  number  " + (i + 1) + ": ") ; students[i].regNo = AM.nextLine() ;

System.out.print("Enter name of student " + (i + 1) + ": ") ; students[i].name = AM.nextLine() ;

System.out.print("Enter CGPA of student " + (i + 1) + ": ") ;
students[i].cgpa = AM.nextFloat() ; sc.nextLine() ;

System.out.print("Enter program  of student " + (i + 1) + ": ") ; students[i].programName = AM.nextLine() ;

System.out.print("Enter school name of student " + (i + 1) + ": ") ; students[i].schoolName = AM.nextLine()
;

System.out.print("Enter proctor name of student " + (i + 1) + ": ") ; students[i].proctorName =
AM.nextLine() ;
}

for (int i = 0; i < n; i++) {
System.out.println("Details of student " + (i + 1) + ":") ;
System.out.println("Registration number: " + students[i].regNo) ;
System.out.println("Name: " + students[i].name) ;
System.out.println("CGPA: " + students[i].cgpa) ;
System.out.println("Programme name: " + students[i].programName) ;
System.out.println("School name: " + students[i].schoolName) ;
System.out.println("Proctor name: " + students[i].proctorName) ;
}
}
```

```
}
```

QUESTION:2

```
import java.util.Scanner;

public class AirlineReservationSystem {
public static void main(String[] args) {
boolean[] seats = new boolean[10];
Scanner KY = new Scanner(System.in);

while (true) {
System.out.println("Please type 1 for First Class or 2 for Economy: ");
int section = KY.nextInt();

if (section == 1) {
for (int i = 0; i < 5; i++) {
if (!seats[i]) {
seats[i] = true;
System.out.println("First Class. Seat number: " + (i + 1));
break;
}
if (i == 4 && seats[i]) {
System.out.println("First Class is full. Would you like to be placed in Economy? (yes/no)");
String choice = KY.next();
if (choice.equals("yes")) {
section = 2;
} else {
System.out.println("Next flight leaves in 3 hours.");
break;
}
}
}
}

if (section == 2)  { for (int i = 5; i
< 10; i++) { if (!seats[i])  {
```

```
seats[i] = true;
System.out.println("Economy Class. Seat number: " + (i + 1));
break;
}
if (i == 9 && seats[i]) {
System.out.println("Economy Class is full. Would you like to be placed in First Class?
(yes/no)");
String choice =KY.next();
if (choice.equals("yes")) {
section = 1;
} else {
System.out.println("Next flight leaves in 3 hours.");
break;
}
}
}
}
}
}
```

QUESTION:3

```
class MathpremearLegue {
int standard; int
numOfStudents; int[]
marks; int firstMark;

public MathpremearLegue(int standard, int numOfStudents)  { this.standard
= standard; this.numOfStudents = numOfStudents; this.marks = new
int[numOfStudents] ;

Scanner sc = new Scanner(System.in) ; for (int i = 0; i <
numOfStudents; i++) {
System.out.print("Enter marks of student " + (i + 1) + ": ") ; marks[i] = sc.nextInt() ;
}

firstMark = marks[0] ; for (int i = 1; i <
numOfStudents; i++) { if (marks[i] < firstMark)
{ firstMark = marks[i] ;
}
}
}

public void findBestClass()  {
int maxStandard = 0; int
maxFirstMark = 0; for (int i = 0;
i < 4; i++) {
if (MathpremearLegue[i].firstMark > maxFirstMark)  { maxStandard =
MathpremearLegue[i].standard; maxFirstMark =
MathpremearLegue[i].firstMark;
```

```
}
}
System.out.println("The standard with the highest first mark is: " + maxStandard) ;
}

public void findBestClass(int option)   {
int maxStandard = 0; int
maxAverage = 0;
int sum; int
average;
for (int i = 0; i < 4; i++) { sum = 0;
for (int j = 0; j < MathpremearLegue[i].numOfStudents; j++) {
sum += MathpremearLegue[i].marks[j] ;
}
average = sum / MathpremearLegue[i].numOfStudents; if (average > maxAverage)   {
maxStandard = MathpremearLegue[i].standard; maxAverage = average;
}
}
System.out.println("The standard with the highest class average is: " + maxStandard) ; }
}

public class Main {
public static void main(String[] args)   {
MathpremearLegue] MathpremearLegue = new MathpremearLegue[4] ; for (int i = 0; i < 4; i++)
{
System.out.print("Enter standard: ") ;
int standard = sc.nextInt() ;
System.out.print("Enter number of students: ") ;
int numOfStudents = sc.nextInt() ;
MathpremearLegue[i] = new MathpremearLegue(standard, numOfStudents) ; }

MathpremearLegue.findBestClass() ;
MathpremearLegue.findBestClass(1) ;
}
}
```