GymClass.java

```
import java.util.Scanner;
public class GymClass{
   private String title;
   private String coach;
   private int capacity;
   private String day;
   private String[] traineesID;
   public static int num = 0;
//constructor:
   public GymClass (String t, String c, int cap, String d){
      title = t;
      coach = c;
      capacity = cap;
      traineesID = new String[cap];
      switch(d.toLowerCase()){
         case "sunday": case "monday": case "tuesday": case "wednesday": case "thursday":case
"saturday":
            day = d;
            break;
         case "friday": //if the user enters friday day will = wednesday instead
            day = "Wednesday";
//getters:
//setters:
//methods:
   public boolean addTrainee(String id){
      switch(Character.toUpperCase(id.charAt(∅))){
         case 'S': case 'G': case 'V': //validating if the id starts with S,G,V
            if(Character.isDigit(id.charAt(2)) && Character.isDigit(id.charAt(3)) &&
\label{lem:character} Character.is \textit{Digit}(id.charAt(4))) \{ \textit{ //vlidating if XXX are actually digits} \} \\
               if(!isFull()){ //validating if the aray is NOT full
                   traineesID[num] = id;
                  num++;
                  return true;
      return false;
   public int checkEnrollment(String id){
      for(int i = 0; i < num; i++){
         if(traineesID[i].equals(id)){
            return i;
      return -1;
   public void display(){
      System.out.printf("Class: %30s%nCoach: %-35s%n", title, coach);
      if(isFull()) System.out.println("This class is full");
      else System.out.println("You can book this class");
```

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```
public boolean isFull(){
    if(capacity == num) //array is full when num = array's length which is capacity
        return true;
    return false;
}

public double calculateIncome(){
    double total = 0;
    for(int i = 0; i < num; i++){
        if(Character.toUpperCase(traineesID[i].charAt(0)) == 'S')
            total += 100;
        if(Character.toUpperCase(traineesID[i].charAt(0)) == 'G')
            total += 120;
        if(Character.toUpperCase(traineesID[i].charAt(0)) == 'V')
            total += 170;
    }
    return total;
}</pre>
```