

DIGITAL ATTENDANCE

When your CS101 teacher gets home after a very tiring day, he just wants to relax but every time he immediately remembers that he needs to check the attendance sheets of that day. In a similar ordinary day, he finally fed up with checking those printed attendance sheets and he decided to write an attendance program to make things easier. But since he is a very busy person, he choose you, the best programmer in the whole CS101 course, to write the program he wants. Fortunately, he did not forget to give you some hints to help you out.

He wants you to design and implement a student class which has exactly three properties:

- 1) the student's name
- 2) a Boolean truth value for the student's attendance, it should be public because your teacher wants to be able to change it freely when using your class
- 3) the next student in the list, if there is no such student this property should be null

The functionality your teacher wants is also very simple:

- 1) He wants to be able to initialize the list with the first student's name.

```
Student list = new Student("Alihan Hüyük");
```

- 2) He wants to be able to add students to the list one by one.

```
list.add("Favorite Student");  
list.add("Okay Student");
```

- 3) He wants to be able to learn how long the list is.

```
list.size(); //returns 3
```

- 4) And last but not least, he wants to be able to get the student with a specific name to be able to change that student's attendance property.

```
Student absentStu = list.find("Favorite Student");  
absentStu.attendance = false;
```

After you complete the class that your teacher wants, you think that a little reward would be nice. Like every other clever programmer, you decide to add a secret "feature" to your program. When your teacher adds your name to the list, you automatically set your attendance to true. After your very hard work, this is the least you can ask for.