

OOP WS2020/21

EXERCISE 6

1. Extends the **Classroom** class from exercise 5 with three new methods:
 - `isParticipating(Student)` will return the status whether the student in the argument is participating in the class or not.
 - `removeStudent(Student)` will remove the student in the argument from the participant list
 - `removeAllParticipants()` will clear the student list

Additionally, the `addStudent` method must be able to deal with duplicates. If the same student is added multiple times only one entry will be recorded on the participant list.

2. Extends the **BucketOfObjects** class from exercise 5 with one new method namely `removeObject(GeometricObject)` which will remove the object in the argument from the bucket. The bucket can store multiple items in its list.

(Hints: You might use Collection Framework instead of array.)