

EXERCISE 8

1. Extends the **Classroom** class from previous exercises with two new methods:
 - **getStudent**(String) will return the participating student whose id match the argument.
 - **getStudentbyName**(String, String) will return array of participating students which have name according to the arguments. The first argument defines the firstname and the second argument defines the lastname. Both arguments can accept "*" for accepting any value, i.e., **getStudentbyName**("*", "*") will return all participating students.
2. Extends the **BucketOfObjects** class from previous exercises with three new methods:
 - **getObjectbyType**(GeometricObject) will return array of GeometricObject instances stored in the bucket that have the same class type as the argument.
 - **getObjectbyArea**(String, double) will return array of GeometricObject instances stored in the bucket which have area that meet the given criteria defined by the arguments. The first argument accepts the following string value: "<", ">", "=", "<=", and ">=". The second argument is the double value that determine the value to be compared with.
 - **getObjectbyPerimeter**(String, double) will return array of GeometricObject instances stored in the bucket which have the perimeter that meet the given criteria defined by the arguments. The order and function of the arguments are similar to the **getObjectbyArea** method.