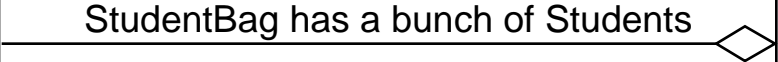


Student
-idNumber = 0: int -id: String -firstName: String -lastName: String -gpa: double -username: String -password: String
+Student(String firstName, String lastName, double gpa): ctor +currentID(): String +getId(): String +getFirstName(): String +setFirstName(String firstName): void +getLastName(): String +setLastName(String lastName): void +getGpa(): double +setGpa(double gpa): void +getUsername(): String +getPassword(): String +setPassword(String password): void +toString(): String

StudentBag
-idMap: HashMap<String, Student> -lastNameMap: HashMap<String, Student>
+StudentBag(int maxSize): ctor +insert(Student s): void +findById(String id): Student +findByLastName(String lastName): Student +deleteById(String id): Student +deleteByLastName(String lastName): Student +getAverageGpa(): double +size(): int



util::StringUtil
+formatId(String id): String +formatStudent(Student s): String +emitUsername(String firstName, String lastName, String id): String +emitPassword(String firstName, String lastName, String id): String +isFourChar(String str): boolean