

## Input Data Types

- Table: string
  - Where: string
  - Email: string
  - ClassID: integer
  - Schedule: integer[60]
  - Password: string
  - Name: string
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- checkExists(table, where)
    - True if yes, false if no
  - getSchedules
    - getStudentSchedules(classID)
      - Array on success, -1 on failure
    - getTeacherSchedules(classID)
      - Array on success, -1 on failure
  - getUserSchedule(email)
    - Schedule array on success, -1 on failure
  - getClassSchedule(classID)
    - Schedule array on success, -1 on failure
  - getClassOfficeHours(classID)
    - Schedule array on success, -1 on failure
  - setSchedule
    - setUserSchedule(email, schedule)
      - 0 if target exists, -1 on failure
    - setClassSchedule(classID, schedule)
      - 0 if target exists, -1 on failure
    - setClassOfficeHours(classID, schedule)
      - 0 if target exists, -1 on failure
  - addUser(email, password)
    - 0 on success, -1 if user already exists
  - setUsername(email, name)
    - 0 on success, -1 if user doesn't exist
  - addClass(classID, name)
    - 0 on success, -1 if class already exists
  - setClassName(classID, name)
    - 0 on success, -1 if class doesn't exist
  - getUsername(email)
    - String on success, -1 on failure
  - getUserDetails(email)
    - Array of email, name, and schedule on success, -1 on failure
  - getClassName(classID)
    - String on success, -1 on failure

- getClassDetails(classID)
  - Array of classID, name, class hours schedule, and office hours schedule on success, -1 on failure
- deleteUser(email)
  - 0 on success, -1 if user doesn't exist
- deleteClass(classID)
  - 0 on success, -1 if class doesn't exist
- joinClass(email, classID, role)
  - 0 on success, -1 if class or user doesn't exist
- leaveClass(email, classID)
  - 0 on success, -1 if userClasses entry doesn't exist
- changeMemberRole(email, classID, role)
  - 0 on success, -1 if userClasses entry doesn't exist
- getUserClasses(email)
  - Array of (classID, role) of the user on success, -1 on failure
- getClassMembers(classID)
  - Array of (email, role) of the class members on success, -1 on failure