

## Unit Test

### 1. main

[1, 2, 4, 5, 6, 7]

Input: String[] args = [], Console Input = "John 0 0"

Output: Console Output "Adding user \"John\".\nfaculty user John added.\n"

[1, 3, 4, 5, 6, 8]

Input: String[] args = ["John", "0", "5"]

Output: Console Output "Adding user \"John\".\nadding user failed. \n"

### 2. add\_user

[1, 2, 3, 4, 5, 6]

Input: String name = "john", int permission\_level = 0, int type = 0

Output: String[] {"John", "faculty"}

[1, 3, 4, 6]

Input: String name = "John", int permission\_level = 0, int type = 1

Output: String[] {"John", "student"}

### 3. capitalize\_first\_ch

[1, 2]

Input: boolean flag = true, String name = "john"

Output: String "John"

[1, 3]

Input: boolean flag = false, String name = "John"

Output: String "John"

## End-to-End Test

main[1, 2, 4, 5 -> add\_user[1, 2, 3 -> capitalize\_first\_ch[1, 2], 4, 5, 6], 6, 7]

Input: String[] args = [], Console Input = "john 3 0"

Output: Console Output "Adding user \"john\".\nfaculty user John added.\n"

main[1, 3, 4, 5 -> add\_user[1, 3 -> capitalize\_firsr\_ch[1, 3], 4, 6], 6, 8]

Input: String[] args = ["John", "0", "5"]

Output: Console Output "Adding user \"John\".\nadding user failed. \n"