

Admin:

```
/opt/anaconda3/envs/data/bin/python "/Users/dingyuyao/Documents/SJSU/Spring2025/DATA200/Lab 1/Main Code/main.py"
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```
(data) (base) dingyuyao@teius-MacBook-Pro Main Code % /opt/anaconda3/envs/data/bin/python  
"/Users/di
```

```
ngyuyao/Documents/SJSU/Spring2025/DATA200/Lab 1/Main Code/main.py"
```

```
=====
```

```
Welcome to CheckMyGrade APP!
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```
=====
```

Enter your Email ID: danielle.johnson@myscu.edu

Enter you password:

Login successful!

1. Go to main menu

2. Change password

3. Logout

Enter your choice: 1

Admin Menu:

1. Display Student Records

2. Display Professor Records

3. Display Course Records

4. Display Grades Records

5. Add/Delete/Modify Student

6. Add/Delete/Modify Professor

7. Add/Delete/Modify Course

8. Add/Delete/Modify Grades

9. Generate Grade Report

10. Return to main menu

Enter your choice: 1

Display Student Records Menu:

1. Display all students' details
2. Display chosen student's details
3. Return to previous menu

Enter your choice: 2

Enter the student ID: amanda.dudley@myscu.edu

Student ID: amanda.dudley@myscu.edu, Name: Amanda Dudley

Course ID: DATA202

Time taken to lookup student information: 0.000555 seconds

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 2

Display Professor Records Menu:

1. Display all professors details
2. Display chosen professor details
3. Return to previous menu

Enter your choice: 2

Enter the professor ID: matthew.moore@myscu.edu

Professor ID: matthew.moore@myscu.edu, Name: Matthew Moore, Rank: Senior Professor

Course ID: DATA200

Time taken to lookup the professor: 0.000029 seconds

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 3

Display Course Records Menu:

1. Display all courses details
2. Display chosen course details
3. Return to previous menu

Enter your choice: 1

Enter the sort by (course_id, course_name): course_id

Enter True, sort in descending order, enter False, sort in ascending order): False

Displaying all courses records (sorted by course_id):

Course ID: DATA200, Course Name: Introduction to Artificial Intelligence, Description: Learn the basics of AI and machine learning.

Course ID: DATA201, Course Name: Data Structures and Algorithms, Description: Understand fundamental data structures and algorithms for programming.

Course ID: DATA202, Course Name: Software Engineering Principles, Description: Explore software development processes and methodologies.

Course ID: DATA203, Course Name: Database Systems, Description: Discover database design and SQL for managing data.

Course ID: DATA204, Course Name: Cybersecurity Basics, Description: Learn about security measures to protect data and systems.

Course ID: DATA205, Course Name: Cloud Computing, Description: Understand the basics of cloud infrastructure and services.

Course ID: DATA206, Course Name: Web Development, Description: Learn to build modern web applications with HTML, CSS, and JavaScript.

Course ID: DATA207, Course Name: Mobile App Development, Description: Explore techniques for creating mobile applications.

Course ID: DATA208, Course Name: Game Development, Description: Learn to design and develop video games.

Course ID: DATA209, Course Name: Big Data Analytics, Description: Understand tools and techniques for analyzing large datasets.

Course ID: DATA210, Course Name: Digital Marketing, Description: Learn online marketing strategies and analytics.

Course ID: DATA211, Course Name: Project Management, Description: Master project planning and execution techniques.

Course ID: DATA212, Course Name: Human-Computer Interaction, Description: Explore design principles for user interfaces.

Course ID: DATA213, Course Name: Operating Systems, Description: Understand the principles and functions of operating systems.

Course ID: DATA214, Course Name: Computer Networks, Description: Learn about network protocols and architectures.

Course ID: DATA215, Course Name: Machine Learning, Description: Discover advanced techniques in supervised and unsupervised learning.

Course ID: DATA216, Course Name: Quantum Computing, Description: An introduction to the principles of quantum computing.

Course ID: DATA217, Course Name: Ethical Hacking, Description: Learn ethical hacking techniques to test and secure systems.

Course ID: DATA218, Course Name: Blockchain Technology, Description: Explore the fundamentals of blockchain and its applications.

Course ID: DATA219, Course Name: Robotics, Description: Learn the basics of robot design and programming.

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor

7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 3

Display Course Records Menu:

1. Display all courses details
2. Display chosen course details
3. Return to previous menu

Enter your choice: 2

Enter the course ID: DATA202

Course ID: DATA202, Course Name: Software Engineering Principles, Description: Explore software development processes and methodologies.

Time taken to lookup the course: 0.000078 seconds

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 4

Display Grades Records Menu:

1. Display all grades details
2. Display chosen grade details
3. Return to previous menu

Enter your choice: 2

Enter the student ID (or leave blank to see all students): deborah.lynch@myscu.edu

Enter the course ID (or leave blank to see all courses):

Displaying grades for Student ID: deborah.lynch@myscu.edu

Course ID: DATA207, Grades: F, Marks: 38

Course ID: DATA217, Grades: A, Marks: 98

Course ID: DATA201, Grades: A, Marks: 92

Time taken to lookup the grade: 0.000387 seconds

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 5

Add/Delete/Modify Student Menu:

1. Add new student
2. Delete student

3. Modify student details

4. Return to previous menu

Enter your choice: 1

Enter the new student's student ID: test@edu.cn

Enter the new student's first name: test

Enter the new student's last name: test

Enter the course ID the new student took (comma-separated, e.g., DATA200,DATA201)): DATA205

Enter the grade (A, B, C, D, F) for course ID DATA205 (or leave blank if not available): A

Enter the mark (0-100) for course ID DATA205 (or leave blank if not available): 97

New student test test added successfully.

Admin Menu:

1. Display Student Records

2. Display Professor Records

3. Display Course Records

4. Display Grades Records

5. Add/Delete/Modify Student

6. Add/Delete/Modify Professor

7. Add/Delete/Modify Course

8. Add/Delete/Modify Grades

9. Generate Grade Report

10. Return to main menu

Enter your choice: 5

Add/Delete/Modify Student Menu:

1. Add new student

2. Delete student

3. Modify student details

4. Return to previous menu

Enter your choice: 2

Enter the student ID of the student you want to delete: jeremy.johnson@myscu.edu

Student ID: jeremy.johnson@myscu.edu deleted successfully from memory.

Student ID: jeremy.johnson@myscu.edu deleted successfully from Student.csv

Student ID: jeremy.johnson@myscu.edu deleted successfully from Grades.csv

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 5

Add/Delete/Modify Student Menu:

1. Add new student
2. Delete student
3. Modify student details
4. Return to previous menu

Enter your choice: 3

Enter the student ID of the student you want to modify: nancy.edwards@myscu.edu

1. Modify student's first name.
2. Modify student's last name.
3. Modify student's course IDs.

Enter your choice: 1

Enter the new first name: Joe

First name updated successfully.

Student data saved to Student.csv successfully.

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 6

Add/Delete/Modify Professor Menu:

1. Add new professor
2. Delete professor
3. Modify professor details
4. Return to previous menu

Enter your choice: 1

Enter the new professor ID: test@edu.com

Enter the new professor name: test

Enter the new professor rank: senior professor

Enter the new course IDs (comma-separated, or leave blank): DATA209

The following course IDs are already assigned to another professor: DATA209

Please choose other courses.

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 6

Add/Delete/Modify Professor Menu:

1. Add new professor
2. Delete professor
3. Modify professor details
4. Return to previous menu

Enter your choice: 2

Enter the professor ID of the professor you want to delete: anthony.gonzalez@myscu.edu

Professor ID: anthony.gonzalez@myscu.edu deleted successfully from memory.

Professor ID: anthony.gonzalez@myscu.edu deleted successfully from Professor.csv

Grades for courses DATA212, DATA218 deleted from Grades.csv.

Course IDs DATA212, DATA218 removed from Student.csv.

Course IDs DATA212, DATA218 deleted from Course.csv.

Course ID DATA212 removed from courses dictionary.

Course ID DATA218 removed from courses dictionary.

Admin Menu:

1. Display Student Records
2. Display Professor Records

3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 6

Add/Delete/Modify Professor Menu:

1. Add new professor
2. Delete professor
3. Modify professor details
4. Return to previous menu

Enter your choice: 3

Enter the professor ID to modify: jeffrey.lawrence@myscu.edu

1. Modify professor name
2. Modify professor rank
3. Modify course IDs

Enter your choice: 2

Enter the new rank: Assistant Professor

Rank updated successfully.

Professor data saved to Professor.csv successfully

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records

5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 7

Add/Delete/Modify Course Menu:

1. Add new course
2. Delete course
3. Modify course details
4. Return to previous menu

Enter your choice: 2

Enter the course ID you want to delete: DATA210

Course ID DATA210 deleted from the memory successfully.

Course ID DATA210 deleted from Course.csv successfully.

Course ID DATA210 deleted from Professor.csv successfully.

Course ID DATA210 deleted from Student.csv successfully.

Course ID DATA210 deleted from Grades.csv successfully.

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades

9. Generate Grade Report

10. Return to main menu

Enter your choice: 7

Add/Delete/Modify Course Menu:

1. Add new course

2. Delete course

3. Modify course details

4. Return to previous menu

Enter your choice: 3

Enter the course ID you want to modify: DATA211

Current course details:

Course ID: DATA211, Course Name: Project Management, Description: Master project planning and execution techniques.

1. Modify course Name

2. Modify description

Enter your choice: 2

Enter the new description: Master project

Description updated to Master project.

Course DATA211 updated successfully in Course.csv.

Admin Menu:

1. Display Student Records

2. Display Professor Records

3. Display Course Records

4. Display Grades Records

5. Add/Delete/Modify Student

6. Add/Delete/Modify Professor

7. Add/Delete/Modify Course

8. Add/Delete/Modify Grades

9. Generate Grade Report

10. Return to main menu

Enter your choice: 8

Add/Delete/Modify Grades Menu:

1. Add new grade

2. Delete grade

3. Modify grade details

4. Return to previous menu

Enter your choice: 2

Enter the student ID of the grade to be deleted: nicholas.arnold@myscu.edu

Enter the course ID of the grade to be deleted: DATA204

Grade deleted successfully.

Admin Menu:

1. Display Student Records

2. Display Professor Records

3. Display Course Records

4. Display Grades Records

5. Add/Delete/Modify Student

6. Add/Delete/Modify Professor

7. Add/Delete/Modify Course

8. Add/Delete/Modify Grades

9. Generate Grade Report

10. Return to main menu

Enter your choice: 9

Generate Grade Report Menu:

1. Generate grade report for a student

2. Generate grade report for a professor

3. Generate grade report for a course

4. Return to previous menu

Enter your choice: 1

Enter the student ID: maria.montgomery@myscu.edu

Grade Report for Maria Montgomery (Student ID: maria.montgomery@myscu.edu)

Course ID: DATA204, Grade: F, Marks: 56

Course ID: DATA217, Grade: A, Marks: 90

Course ID: DATA203, Grade: F, Marks: 24

Course ID: DATA208, Grade: F, Marks: 16

Statistics:

Total Courses Enrolled: 4

Average Grade: 46.50

Median Grade: 40.00

Highest Grade: 90.0

Lowest Grade: 16.0

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades

9. Generate Grade Report

10. Return to main menu

Enter your choice: 9

Generate Grade Report Menu:

1. Generate grade report for a student

2. Generate grade report for a professor

3. Generate grade report for a course

4. Return to previous menu

Enter your choice: 2

Enter the professor ID: matthew.moore@myscu.edu

Grade Report for Matthew Moore (Professor ID: matthew.moore@myscu.edu)

Course ID: DATA200

Statistics:

Total students graded: 162

Average Grade: 76.30

Median Grade: 77.00

Highest Grade: 100.0

Lowest Grade: 9.0

Admin Menu:

1. Display Student Records

2. Display Professor Records

3. Display Course Records

4. Display Grades Records

5. Add/Delete/Modify Student

6. Add/Delete/Modify Professor

7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 9

Generate Grade Report Menu:

1. Generate grade report for a student
2. Generate grade report for a professor
3. Generate grade report for a course
4. Return to previous menu

Enter your choice: 3

Enter the course ID: DATA219

Grade Report for Course: Robotics (Course ID: DATA219)

Student ID: george.daniel@myscu.edu, Name: George Daniel, Grade: C, Marks: 74

Student ID: angela.cohen@myscu.edu, Name: Angela Cohen, Grade: C, Marks: 78

Student ID: whitney.hicks@myscu.edu, Name: Whitney Hicks, Grade: F, Marks: 31

Student ID: laura.henderson@myscu.edu, Name: Laura Henderson, Grade: F, Marks: 4

Student ID: bryan.james@myscu.edu, Name: Bryan James, Grade: F, Marks: 7

Student ID: wendy.rice@myscu.edu, Name: Wendy Rice, Grade: B, Marks: 82

Student ID: joseph.davidson@myscu.edu, Name: Joseph Davidson, Grade: A, Marks: 91

Student ID: kenneth.fowler@myscu.edu, Name: Kenneth Fowler, Grade: F, Marks: 24

Student ID: james.collins@myscu.edu, Name: James Collins, Grade: F, Marks: 12

Student ID: david.walker@myscu.edu, Name: David Walker, Grade: B, Marks: 81

Student ID: michele.jones@myscu.edu, Name: Michele Jones, Grade: C, Marks: 78

Student ID: john.caldwell@myscu.edu, Name: John Caldwell, Grade: B, Marks: 86

Student ID: jason.anderson@myscu.edu, Name: Jason Anderson, Grade: F, Marks: 42

Student ID: james.west@myscu.edu, Name: James West, Grade: F, Marks: 45

Student ID: tanya.house@myscu.edu, Name: Tanya House, Grade: D, Marks: 67

Student ID: todd.lewis@myscu.edu, Name: Todd Lewis, Grade: A, Marks: 95

Student ID: tanya.riley@myscu.edu, Name: Tanya Riley, Grade: D, Marks: 67

Student ID: brooke.leonard@myscu.edu, Name: Brooke Leonard, Grade: C, Marks: 70

Student ID: brooke.harvey@myscu.edu, Name: Brooke Harvey, Grade: C, Marks: 75

Student ID: martha.warner@myscu.edu, Name: Martha Warner, Grade: D, Marks: 69

Student ID: destiny.smith@myscu.edu, Name: Destiny Smith, Grade: C, Marks: 77

Student ID: lisa.evans@myscu.edu, Name: Lisa Evans, Grade: D, Marks: 67

Student ID: elizabeth.mcmillan@myscu.edu, Name: Elizabeth Mcmillan, Grade: D, Marks: 64

Student ID: adam.wise@myscu.edu, Name: Adam Wise, Grade: D, Marks: 62

Student ID: mary.aguilar@myscu.edu, Name: Mary Aguilar, Grade: A, Marks: 99

Student ID: tina.herrera@myscu.edu, Name: Tina Herrera, Grade: B, Marks: 85

Student ID: lee.charles@myscu.edu, Name: Lee Charles, Grade: A, Marks: 92

Student ID: cynthia.rogers@myscu.edu, Name: Cynthia Rogers, Grade: D, Marks: 65

Student ID: james.horton@myscu.edu, Name: James Horton, Grade: C, Marks: 72

Student ID: troy.sanchez@myscu.edu, Name: Troy Sanchez, Grade: B, Marks: 83

Student ID: caitlin.dodson@myscu.edu, Name: Caitlin Dodson, Grade: A, Marks: 99

Student ID: thomas.green@myscu.edu, Name: Thomas Green, Grade: B, Marks: 88

Student ID: katie.boyd@myscu.edu, Name: Katie Boyd, Grade: C, Marks: 75

Student ID: jesse.benson@myscu.edu, Name: Jesse Benson, Grade: D, Marks: 67

Student ID: robert.clark@myscu.edu, Name: Robert Clark, Grade: B, Marks: 86

Student ID: robert.adkins@myscu.edu, Name: Robert Adkins, Grade: D, Marks: 69

Student ID: jeffrey.robinson@myscu.edu, Name: Jeffrey Robinson, Grade: A, Marks: 95

Student ID: richard.martin@myscu.edu, Name: Richard Martin, Grade: C, Marks: 71

Student ID: derek.murray@myscu.edu, Name: Derek Murray, Grade: D, Marks: 69

Student ID: brent.gray@myscu.edu, Name: Brent Gray, Grade: B, Marks: 88

Student ID: kathleen.gray@myscu.edu, Name: Kathleen Gray, Grade: A, Marks: 96

Student ID: johnny.miller@myscu.edu, Name: Johnny Miller, Grade: B, Marks: 89

Student ID: andrew.hernandez@myscu.edu, Name: Andrew Hernandez, Grade: D, Marks: 62

Student ID: anne.robinson@myscu.edu, Name: Anne Robinson, Grade: C, Marks: 71

Student ID: holly.wang@myscu.edu, Name: Holly Wang, Grade: C, Marks: 71

Student ID: larry.byrd@myscu.edu, Name: Larry Byrd, Grade: D, Marks: 65

Student ID: susan.sanders@myscu.edu, Name: Susan Sanders, Grade: C, Marks: 72

Student ID: ross.wood@myscu.edu, Name: Ross Wood, Grade: B, Marks: 83

Student ID: daniel.yu@myscu.edu, Name: Daniel Yu, Grade: C, Marks: 70

Student ID: amanda.webb@myscu.edu, Name: Amanda Webb, Grade: C, Marks: 74

Student ID: melissa.white@myscu.edu, Name: Melissa White, Grade: D, Marks: 67

Student ID: hannah.brewer@myscu.edu, Name: Hannah Brewer, Grade: A, Marks: 95

Student ID: travis.mcguire@myscu.edu, Name: Travis McGuire, Grade: A, Marks: 100

Student ID: justin.garcia@myscu.edu, Name: Justin Garcia, Grade: C, Marks: 73

Student ID: heidi.martinez@myscu.edu, Name: Heidi Martinez, Grade: D, Marks: 66

Student ID: alexandra.hayes@myscu.edu, Name: Alexandra Hayes, Grade: B, Marks: 87

Student ID: jacqueline.gibson@myscu.edu, Name: Jacqueline Gibson, Grade: C, Marks: 76

Student ID: ronald.stephens@myscu.edu, Name: Ronald Stephens, Grade: D, Marks: 66

Student ID: keith.martinez@myscu.edu, Name: Keith Martinez, Grade: B, Marks: 85

Student ID: emily.adams@myscu.edu, Name: Emily Adams, Grade: A, Marks: 94

Student ID: brenda.walters@myscu.edu, Name: Brenda Walters, Grade: C, Marks: 79

Student ID: jacob.cox@myscu.edu, Name: Jacob Cox, Grade: B, Marks: 89

Student ID: ashley.hall@myscu.edu, Name: Ashley Hall, Grade: C, Marks: 70

Student ID: kimberly.williams@myscu.edu, Name: Kimberly Williams, Grade: C, Marks: 75

Student ID: tina.simpson@myscu.edu, Name: Tina Simpson, Grade: A, Marks: 96

Student ID: norman.stewart@myscu.edu, Name: Norman Stewart, Grade: C, Marks: 76

Student ID: corey.schultz@myscu.edu, Name: Corey Schultz, Grade: C, Marks: 70

Student ID: albert.ballard@myscu.edu, Name: Albert Ballard, Grade: A, Marks: 96

Student ID: gina.garner@myscu.edu, Name: Gina Garner, Grade: C, Marks: 72

Student ID: brandon.obrien@myscu.edu, Name: Brandon Obrien, Grade: C, Marks: 76

Student ID: dana.oliver@myscu.edu, Name: Dana Oliver, Grade: C, Marks: 78

Student ID: courtney.berger@myscu.edu, Name: Courtney Berger, Grade: B, Marks: 89

Student ID: alexander.herrera@myscu.edu, Name: Alexander Herrera, Grade: B, Marks: 87

Student ID: daniel.hall@myscu.edu, Name: Daniel Hall, Grade: A, Marks: 99

Student ID: angel.henson@myscu.edu, Name: Angel Henson, Grade: D, Marks: 60

Student ID: julia.moore@myscu.edu, Name: Julia Moore, Grade: B, Marks: 87

Student ID: michael.sanders@myscu.edu, Name: Michael Sanders, Grade: C, Marks: 75

Student ID: melanie.gibson@myscu.edu, Name: Melanie Gibson, Grade: C, Marks: 78

Student ID: jamie.robinson@myscu.edu, Name: Jamie Robinson, Grade: B, Marks: 80

Student ID: mark.vang@myscu.edu, Name: Mark Vang, Grade: D, Marks: 62

Student ID: jacqueline.farrell@myscu.edu, Name: Jacqueline Farrell, Grade: D, Marks: 63

Student ID: sarah.gallegos@myscu.edu, Name: Sarah Gallegos, Grade: B, Marks: 89

Student ID: richard.thomas@myscu.edu, Name: Richard Thomas, Grade: C, Marks: 71

Student ID: julie.lewis@myscu.edu, Name: Julie Lewis, Grade: B, Marks: 86

Student ID: charles.hensley@myscu.edu, Name: Charles Hensley, Grade: C, Marks: 73

Student ID: samantha.davis@myscu.edu, Name: Samantha Davis, Grade: C, Marks: 78

Student ID: karen.wolf@myscu.edu, Name: Karen Wolf, Grade: C, Marks: 75

Student ID: lisa.santiago@myscu.edu, Name: Lisa Santiago, Grade: C, Marks: 70

Student ID: kaitlyn.cole@myscu.edu, Name: Kaitlyn Cole, Grade: D, Marks: 69

Student ID: laurie.taylor@myscu.edu, Name: Laurie Taylor, Grade: A, Marks: 90

Student ID: melissa.mitchell@myscu.edu, Name: Melissa Mitchell, Grade: C, Marks: 70

Student ID: kristina.cooper@myscu.edu, Name: Kristina Cooper, Grade: C, Marks: 76

Student ID: jessica.fuller@myscu.edu, Name: Jessica Fuller, Grade: A, Marks: 99

Student ID: bobby.mahoney@myscu.edu, Name: Bobby Mahoney, Grade: D, Marks: 66

Student ID: karen.lee@myscu.edu, Name: Karen Lee, Grade: C, Marks: 70

Student ID: patricia.hughes@myscu.edu, Name: Patricia Hughes, Grade: C, Marks: 78

Student ID: tyler.glass@myscu.edu, Name: Tyler Glass, Grade: C, Marks: 77

Student ID: amy.morris@myscu.edu, Name: Amy Morris, Grade: C, Marks: 72

Student ID: erin.cisneros@myscu.edu, Name: Erin Cisneros, Grade: A, Marks: 97

Student ID: jose.green@myscu.edu, Name: Jose Green, Grade: B, Marks: 87

Student ID: robert.fowler@myscu.edu, Name: Robert Fowler, Grade: B, Marks: 83

Student ID: john.grimes@myscu.edu, Name: John Grimes, Grade: A, Marks: 94

Student ID: xavier.jimenez@myscu.edu, Name: Xavier Jimenez, Grade: C, Marks: 71

Student ID: kyle.johnson@myscu.edu, Name: Kyle Johnson, Grade: D, Marks: 67

Student ID: destiny.ruiz@myscu.edu, Name: Destiny Ruiz, Grade: A, Marks: 96

Student ID: derrick.cook@myscu.edu, Name: Derrick Cook, Grade: C, Marks: 74

Student ID: catherine.robertson@myscu.edu, Name: Catherine Robertson, Grade: C, Marks: 70

Student ID: mark.austin@myscu.edu, Name: Mark Austin, Grade: A, Marks: 94

Student ID: kevin.cabrera@myscu.edu, Name: Kevin Cabrera, Grade: B, Marks: 83

Student ID: tina.silva@myscu.edu, Name: Tina Silva, Grade: A, Marks: 96

Student ID: robert.hampton@myscu.edu, Name: Robert Hampton, Grade: A, Marks: 91

Student ID: alicia.edwards@myscu.edu, Name: Alicia Edwards, Grade: C, Marks: 73

Student ID: kelsey.le@myscu.edu, Name: Kelsey Le, Grade: C, Marks: 75

Student ID: joshua.martinez@myscu.edu, Name: Joshua Martinez, Grade: A, Marks: 97

Student ID: richard.donovan@myscu.edu, Name: Richard Donovan, Grade: D, Marks: 67

Student ID: katherine.thompson@myscu.edu, Name: Katherine Thompson, Grade: A, Marks: 99

Student ID: paula.padilla@myscu.edu, Name: Paula Padilla, Grade: C, Marks: 79

Student ID: dennis.hernandez@myscu.edu, Name: Dennis Hernandez, Grade: B, Marks: 86

Student ID: edward.murphy@myscu.edu, Name: Edward Murphy, Grade: C, Marks: 71

Student ID: randy.velasquez@myscu.edu, Name: Randy Velasquez, Grade: D, Marks: 61

Student ID: robert.mack@myscu.edu, Name: Robert Mack, Grade: A, Marks: 97

Student ID: molly.knox@myscu.edu, Name: Molly Knox, Grade: A, Marks: 91

Student ID: dorothy.ryan@myscu.edu, Name: Dorothy Ryan, Grade: B, Marks: 82

Student ID: brandon.yang@myscu.edu, Name: Brandon Yang, Grade: D, Marks: 63

Student ID: richard.young@myscu.edu, Name: Richard Young, Grade: C, Marks: 77

Student ID: carla.chambers@myscu.edu, Name: Carla Chambers, Grade: D, Marks: 64

Student ID: douglas.keller@myscu.edu, Name: Douglas Keller, Grade: D, Marks: 66

Student ID: yvonne.mendoza@myscu.edu, Name: Yvonne Mendoza, Grade: D, Marks: 60

Student ID: oscar.ferguson@myscu.edu, Name: Oscar Ferguson, Grade: D, Marks: 66

Student ID: michael.green@myscu.edu, Name: Michael Green, Grade: A, Marks: 94

Student ID: robin.wood@myscu.edu, Name: Robin Wood, Grade: C, Marks: 77

Student ID: jose.donovan@myscu.edu, Name: Jose Donovan, Grade: C, Marks: 70

Student ID: beth.butler@myscu.edu, Name: Beth Butler, Grade: D, Marks: 60

Student ID: gary.norton@myscu.edu, Name: Gary Norton, Grade: A, Marks: 97

Student ID: gary.cortez@myscu.edu, Name: Gary Cortez, Grade: D, Marks: 65

Student ID: brian.johnson@myscu.edu, Name: Brian Johnson, Grade: C, Marks: 71

Student ID: katherine.davis@myscu.edu, Name: Katherine Davis, Grade: B, Marks: 87

Student ID: nicholas.tran@myscu.edu, Name: Nicholas Tran, Grade: C, Marks: 73

Student ID: antonio.mcfarland@myscu.edu, Name: Antonio Mcfarland, Grade: D, Marks: 63

Student ID: kim.johnson@myscu.edu, Name: Kim Johnson, Grade: B, Marks: 81

Student ID: erin.guerrero@myscu.edu, Name: Erin Guerrero, Grade: C, Marks: 75

Statistics:

Total students graded: 141

Average Grade: 75.67

Median Grade: 75.00

Highest Grade: 100.0

Lowest Grade: 4.0

Admin Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Add/Delete/Modify Student
6. Add/Delete/Modify Professor
7. Add/Delete/Modify Course
8. Add/Delete/Modify Grades
9. Generate Grade Report
10. Return to main menu

Enter your choice: 10

1. Go to main menu
2. Change password

3. Logout

Enter your choice: 2

Please enter your new password:

Please enter your new password again:

Changing password successfully!

1. Go to main menu

2. Change password

3. Logout

Enter your choice: 3

Professor:

```
(data) (base) dingyuyao@teius-MacBook-Pro Main Code % /opt/anaconda3/envs/data/bin/python  
"/Users/di
```

```
ngyuyao/Documents/SJSU/Spring2025/DATA200/Lab 1/Main Code/main.py"
```

```
=====
```

Welcome to CheckMyGrade APP!

```
=====
```

Enter your Email ID: jeffery.wagner@myscu.edu

Enter you password:

Login successful!

1. Go to main menu

2. Change password

3. Logout

Enter your choice: 1

Professor Menu:

1. Display Student Records

2. Display Professor Records

3. Display Course Records

4. Display Grades Records

5. Modify My Details

6. Add/Delete/Modify Course

7. Add/Delete/Modify Grades

8. Generate Grade Report

9. Return to main menu

Enter your choice: 1

Display Student Records Menu:

1. Display the details of all students in my courses

2. Display all students details
3. Display chosen student details
4. Return to previous menu

Enter your choice: 3

Enter the student ID: lindsay.blair@myscu.edu

Student ID: lindsay.blair@myscu.edu, Name: Lindsay Blair

Course ID: DATA217

Time taken to lookup student information: 0.000304 seconds

Professor Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Modify My Details
6. Add/Delete/Modify Course
7. Add/Delete/Modify Grades
8. Generate Grade Report
9. Return to main menu

Enter your choice: 2

Display Professor Records Menu:

1. Display my details
2. Display all professors details
3. Display chosen professor details
4. Return to previous menu

Enter your choice: 1

Professor ID: jeffery.wagner@myscu.edu, Name: Jeffery Wagner, Rank: Senior Professor

Course ID: DATA214

Course ID: DATA204

Course ID: DATA215

Professor Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Modify My Details
6. Add/Delete/Modify Course
7. Add/Delete/Modify Grades
8. Generate Grade Report
9. Return to main menu

Enter your choice: 3

Display Course Records Menu:

1. Display the details of all courses which I teach
2. Display all courses details
3. Display chosen course details
4. Return to previous menu

Enter your choice: 1

Course ID: DATA214, Course Name: Computer Networks, Description: Learn about network protocols and architectures.

Course ID: DATA204, Course Name: Cybersecurity Basics, Description: Learn about security measures to protect data and systems.

Course ID: DATA215, Course Name: Machine Learning, Description: Discover advanced techniques in supervised and unsupervised learning.

Professor Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Modify My Details
6. Add/Delete/Modify Course
7. Add/Delete/Modify Grades
8. Generate Grade Report
9. Return to main menu

Enter your choice: 4

Display Grades Records Menu:

1. Display the grades of all courses which I teach
2. Display the grades of chosen course which I teach
3. Return to previous menu

Enter your choice: 2

Enter the course ID: DATA214

Enter the sort by (student_id, grades, marks): marks

Enter True, sort in descending order, enter False, sort in ascending order): True

['DATA214', 'DATA204', 'DATA215']

Displaying grades for Course ID: DATA214 (Taught by Professor Jeffery Wagner, Sorted by marks)

Student ID: lee.charles@myscu.edu, Grades: A, Marks: 100

Student ID: melissa.jones@myscu.edu, Grades: A, Marks: 100

Student ID: robert.villa@myscu.edu, Grades: A, Marks: 100

Student ID: jamie.robinson@myscu.edu, Grades: A, Marks: 100

Student ID: brandy.jackson@myscu.edu, Grades: A, Marks: 100

Student ID: stephanie.ballard@myscu.edu, Grades: A, Marks: 100

Student ID: scott.mills@myscu.edu, Grades: A, Marks: 99

Student ID: amanda.erickson@myscu.edu, Grades: A, Marks: 99

Student ID: sara.mcdowell@myscu.edu, Grades: A, Marks: 99

Student ID: earl.anderson@myscu.edu, Grades: A, Marks: 98

Student ID: diana.moore@myscu.edu, Grades: A, Marks: 98

Student ID: melanie.davis@myscu.edu, Grades: A, Marks: 98

Student ID: timothy.booth@myscu.edu, Grades: A, Marks: 98

Student ID: monica.harvey@myscu.edu, Grades: A, Marks: 97

Student ID: cory.jennings@myscu.edu, Grades: A, Marks: 97

Student ID: curtis.singleton@myscu.edu, Grades: A, Marks: 97

Student ID: michael.morales@myscu.edu, Grades: A, Marks: 97

Student ID: elizabeth.robinson@myscu.edu, Grades: A, Marks: 97

Student ID: alexander.moreno@myscu.edu, Grades: A, Marks: 97

Student ID: reginald.robinson@myscu.edu, Grades: A, Marks: 96

Student ID: phyllis.manning@myscu.edu, Grades: A, Marks: 96

Student ID: monique.wallace@myscu.edu, Grades: A, Marks: 96

Student ID: randy.simpson@myscu.edu, Grades: A, Marks: 96

Student ID: patty.singleton@myscu.edu, Grades: A, Marks: 95

Student ID: maureen.hernandez@myscu.edu, Grades: A, Marks: 94

Student ID: lindsey.chavez@myscu.edu, Grades: A, Marks: 94

Student ID: john.wilson@myscu.edu, Grades: A, Marks: 93

Student ID: tanya.riley@myscu.edu, Grades: A, Marks: 92

Student ID: amy.li@myscu.edu, Grades: A, Marks: 92

Student ID: michael.williams@myscu.edu, Grades: A, Marks: 92

Student ID: glen.barr@myscu.edu, Grades: A, Marks: 92

Student ID: amy.levine@myscu.edu, Grades: A, Marks: 91

Student ID: randy.collins@myscu.edu, Grades: A, Marks: 91

Student ID: donna.le@myscu.edu, Grades: A, Marks: 91

Student ID: david.caldwell@myscu.edu, Grades: A, Marks: 90

Student ID: casey.welch@myscu.edu, Grades: A, Marks: 90

Student ID: linda.melendez@myscu.edu, Grades: A, Marks: 90

Student ID: haley.lyons@myscu.edu, Grades: B, Marks: 89

Student ID: ashley.hall@myscu.edu, Grades: B, Marks: 89

Student ID: matthew.wilson@myscu.edu, Grades: B, Marks: 89

Student ID: colton.clay@myscu.edu, Grades: B, Marks: 89

Student ID: jon.smith@myscu.edu, Grades: B, Marks: 89

Student ID: alexis.harris@myscu.edu, Grades: B, Marks: 89

Student ID: michelle.wright@myscu.edu, Grades: B, Marks: 88

Student ID: christopher.hayden@myscu.edu, Grades: B, Marks: 88

Student ID: henry.lewis@myscu.edu, Grades: B, Marks: 87

Student ID: dana.green@myscu.edu, Grades: B, Marks: 86

Student ID: sierra.wagner@myscu.edu, Grades: B, Marks: 86

Student ID: brandon.obrien@myscu.edu, Grades: B, Marks: 85

Student ID: madison.blankenship@myscu.edu, Grades: B, Marks: 85

Student ID: richard.thomas@myscu.edu, Grades: B, Marks: 85

Student ID: karen.lee@myscu.edu, Grades: B, Marks: 85

Student ID: megan.flores@myscu.edu, Grades: B, Marks: 85

Student ID: audrey.nichols@myscu.edu, Grades: B, Marks: 85

Student ID: adrian.burgess@myscu.edu, Grades: B, Marks: 84

Student ID: stefanie.gonzalez@myscu.edu, Grades: B, Marks: 83

Student ID: jose.green@myscu.edu, Grades: B, Marks: 83

Student ID: mariah.miller@myscu.edu, Grades: B, Marks: 82

Student ID: marcus.cordova@myscu.edu, Grades: B, Marks: 82

Student ID: alyssa.chavez@myscu.edu, Grades: B, Marks: 82

Student ID: brittany.kane@myscu.edu, Grades: B, Marks: 81

Student ID: amy.morris@myscu.edu, Grades: B, Marks: 81

Student ID: jacob.gill@myscu.edu, Grades: B, Marks: 81

Student ID: russell.campbell@myscu.edu, Grades: B, Marks: 80

Student ID: amber.vance@myscu.edu, Grades: B, Marks: 80

Student ID: samuel.wolfe@myscu.edu, Grades: C, Marks: 79

Student ID: albert.ballard@myscu.edu, Grades: C, Marks: 79

Student ID: daniel.bruce@myscu.edu, Grades: C, Marks: 79

Student ID: robert.mack@myscu.edu, Grades: C, Marks: 79

Student ID: kristi.flores@myscu.edu, Grades: C, Marks: 79

Student ID: tara.white@myscu.edu, Grades: C, Marks: 78

Student ID: nathan.hines@myscu.edu, Grades: C, Marks: 78

Student ID: cheryl.archer@myscu.edu, Grades: C, Marks: 77

Student ID: andrea.reyes@myscu.edu, Grades: C, Marks: 77

Student ID: kathryn.nelson@myscu.edu, Grades: C, Marks: 77

Student ID: alicia.bryant@myscu.edu, Grades: C, Marks: 76

Student ID: paula.padilla@myscu.edu, Grades: C, Marks: 76

Student ID: william.armstrong@myscu.edu, Grades: C, Marks: 76

Student ID: martin.galvan@myscu.edu, Grades: C, Marks: 75

Student ID: robert.clark@myscu.edu, Grades: C, Marks: 75

Student ID: harry.smith@myscu.edu, Grades: C, Marks: 75

Student ID: brian.martinez@myscu.edu, Grades: C, Marks: 75

Student ID: thomas.pierce@myscu.edu, Grades: C, Marks: 74

Student ID: mike.moore@myscu.edu, Grades: C, Marks: 74

Student ID: mary.aguilar@myscu.edu, Grades: C, Marks: 74

Student ID: kevin.vasquez@myscu.edu, Grades: C, Marks: 74

Student ID: daniel.roberts@myscu.edu, Grades: C, Marks: 74

Student ID: melissa.short@myscu.edu, Grades: C, Marks: 73

Student ID: troy.miller@myscu.edu, Grades: C, Marks: 73

Student ID: charles.walsh@myscu.edu, Grades: C, Marks: 73

Student ID: erin.cisneros@myscu.edu, Grades: C, Marks: 73

Student ID: tyler.compton@myscu.edu, Grades: C, Marks: 73

Student ID: joshua.riddle@myscu.edu, Grades: C, Marks: 73

Student ID: christopher.walker@myscu.edu, Grades: C, Marks: 72

Student ID: andrea.davis@myscu.edu, Grades: C, Marks: 72

Student ID: becky.lewis@myscu.edu, Grades: C, Marks: 72

Student ID: ashley.jacobs@myscu.edu, Grades: C, Marks: 72

Student ID: sandra.jones@myscu.edu, Grades: C, Marks: 71
Student ID: adrian.turner@myscu.edu, Grades: C, Marks: 71
Student ID: mark.solis@myscu.edu, Grades: C, Marks: 71
Student ID: charles.lewis@myscu.edu, Grades: C, Marks: 70
Student ID: erica.le@myscu.edu, Grades: C, Marks: 70
Student ID: lynn.bentley@myscu.edu, Grades: C, Marks: 70
Student ID: erik.watson@myscu.edu, Grades: C, Marks: 70
Student ID: kaitlyn.cole@myscu.edu, Grades: C, Marks: 70
Student ID: martin.campos@myscu.edu, Grades: C, Marks: 70
Student ID: denise.webster@myscu.edu, Grades: D, Marks: 69
Student ID: brianna.warren@myscu.edu, Grades: D, Marks: 69
Student ID: anna.faulkner@myscu.edu, Grades: D, Marks: 69
Student ID: gail.scott@myscu.edu, Grades: D, Marks: 69
Student ID: andrea.williams@myscu.edu, Grades: D, Marks: 68
Student ID: kathleen.gray@myscu.edu, Grades: D, Marks: 68
Student ID: john.durham@myscu.edu, Grades: D, Marks: 68
Student ID: danielle.coleman@myscu.edu, Grades: D, Marks: 68
Student ID: jeffrey.brown@myscu.edu, Grades: D, Marks: 68
Student ID: pamela.paul@myscu.edu, Grades: D, Marks: 68
Student ID: hailey.johnson@myscu.edu, Grades: D, Marks: 68
Student ID: sabrina.phillips@myscu.edu, Grades: D, Marks: 68
Student ID: melissa.ashley@myscu.edu, Grades: D, Marks: 67
Student ID: lisa.pearson@myscu.edu, Grades: D, Marks: 67
Student ID: matthew.gomez@myscu.edu, Grades: D, Marks: 67
Student ID: james.fox@myscu.edu, Grades: D, Marks: 67
Student ID: bobby.smith@myscu.edu, Grades: D, Marks: 66
Student ID: edward.vaughn@myscu.edu, Grades: D, Marks: 66
Student ID: christopher.franklin@myscu.edu, Grades: D, Marks: 65
Student ID: gabriel.parker@myscu.edu, Grades: D, Marks: 64
Student ID: pamela.sanchez@myscu.edu, Grades: D, Marks: 63

Student ID: michael.matthews@myscu.edu, Grades: D, Marks: 63
Student ID: anthony.williams@myscu.edu, Grades: D, Marks: 63
Student ID: kevin.zimmerman@myscu.edu, Grades: D, Marks: 63
Student ID: mason.krueger@myscu.edu, Grades: D, Marks: 63
Student ID: jacqueline.hill@myscu.edu, Grades: D, Marks: 62
Student ID: debra.mack@myscu.edu, Grades: D, Marks: 62
Student ID: jennifer.garcia@myscu.edu, Grades: D, Marks: 62
Student ID: julie.rivera@myscu.edu, Grades: D, Marks: 61
Student ID: norman.stewart@myscu.edu, Grades: D, Marks: 61
Student ID: sarah.gallegos@myscu.edu, Grades: D, Marks: 61
Student ID: martha.drake@myscu.edu, Grades: D, Marks: 61
Student ID: kelly.roberts@myscu.edu, Grades: D, Marks: 61
Student ID: tracy.kelly@myscu.edu, Grades: D, Marks: 61
Student ID: cameron.davis@myscu.edu, Grades: D, Marks: 60
Student ID: rebecca.carlson@myscu.edu, Grades: D, Marks: 60
Student ID: jose.young@myscu.edu, Grades: D, Marks: 60
Student ID: brian.smith@myscu.edu, Grades: D, Marks: 60
Student ID: andrew.hickman@myscu.edu, Grades: F, Marks: 41
Student ID: tracey.garcia@myscu.edu, Grades: F, Marks: 30
Student ID: natalie.arroyo@myscu.edu, Grades: F, Marks: 16
Student ID: alexander.le@myscu.edu, Grades: F, Marks: 9

Do you want to see statistics? (yes/no): yes

<class 'list'>

Choose statistics to display:

1. Average Mark
2. Median Mark
3. Highest Mark
4. Lowest Mark

5. All of the above

Enter your choice (1-5): 5

All Statistics:

1. Average Mark: 77.78

2. Median Mark: 77.0

3. Highest Mark: 100

4. Lowest Mark: 9

Professor Menu:

1. Display Student Records

2. Display Professor Records

3. Display Course Records

4. Display Grades Records

5. Modify My Details

6. Add/Delete/Modify Course

7. Add/Delete/Modify Grades

8. Generate Grade Report

9. Return to main menu

Enter your choice: 4

Display Grades Records Menu:

1. Display the grades of all courses which I teach

2. Display the grades of chosen course which I teach

3. Return to previous menu

Enter your choice: 2

Enter the course ID: DATA204

Enter the sort by (student_id, grades, marks): student_id

Enter True, sort in descending order, enter False, sort in ascending order): False

['DATA214', 'DATA204', 'DATA215']

Displaying grades for Course ID: DATA204 (Taught by Professor Jeffery Wagner, Sorted by student_id)

Student ID: adrienne.ellis@myscu.edu, Grades: A, Marks: 91

Student ID: alexander.herrera@myscu.edu, Grades: A, Marks: 95

Student ID: alexis.giles@myscu.edu, Grades: A, Marks: 91

Student ID: alyssa.coleman@myscu.edu, Grades: A, Marks: 92

Student ID: amanda.morrow@myscu.edu, Grades: A, Marks: 100

Student ID: amber.vance@myscu.edu, Grades: D, Marks: 69

Student ID: andrea.martinez@myscu.edu, Grades: B, Marks: 82

Student ID: andrea.rowe@myscu.edu, Grades: B, Marks: 88

Student ID: andrea.salazar@myscu.edu, Grades: B, Marks: 80

Student ID: andrew.hernandez@myscu.edu, Grades: A, Marks: 93

Student ID: angela.russell@myscu.edu, Grades: D, Marks: 69

Student ID: ariel.hodge@myscu.edu, Grades: A, Marks: 95

Student ID: audrey.aguirre@myscu.edu, Grades: A, Marks: 92

Student ID: beth.butler@myscu.edu, Grades: A, Marks: 90

Student ID: bobby.smith@myscu.edu, Grades: C, Marks: 74

Student ID: bonnie.kennedy@myscu.edu, Grades: D, Marks: 68

Student ID: brian.hernandez@myscu.edu, Grades: A, Marks: 90

Student ID: brian.johnson@myscu.edu, Grades: B, Marks: 88

Student ID: brooke.harvey@myscu.edu, Grades: A, Marks: 90

Student ID: bryan.kelley@myscu.edu, Grades: A, Marks: 91

Student ID: bryan.parsons@myscu.edu, Grades: C, Marks: 73

Student ID: caroline.bell@myscu.edu, Grades: C, Marks: 72

Student ID: casey.welch@myscu.edu, Grades: D, Marks: 68

Student ID: catherine.dixon@myscu.edu, Grades: C, Marks: 79

Student ID: charles.ware@myscu.edu, Grades: B, Marks: 82

Student ID: chase.lin@myscu.edu, Grades: C, Marks: 71

Student ID: chase.martin@myscu.edu, Grades: A, Marks: 94

Student ID: chelsea.hernandez@myscu.edu, Grades: F, Marks: 28

Student ID: chris.richard@myscu.edu, Grades: A, Marks: 95

Student ID: christopher.williams@myscu.edu, Grades: B, Marks: 87

Student ID: colin.rodgers@myscu.edu, Grades: C, Marks: 76

Student ID: collin.jordan@myscu.edu, Grades: F, Marks: 39

Student ID: colton.clay@myscu.edu, Grades: B, Marks: 86

Student ID: connie.simmons@myscu.edu, Grades: B, Marks: 86

Student ID: cynthia.diaz@myscu.edu, Grades: B, Marks: 85

Student ID: daniel.burton@myscu.edu, Grades: F, Marks: 18

Student ID: darlene.ray@myscu.edu, Grades: C, Marks: 76

Student ID: david.riggs@myscu.edu, Grades: A, Marks: 100

Student ID: david.walker@myscu.edu, Grades: F, Marks: 0

Student ID: dawn.johnson@myscu.edu, Grades: C, Marks: 77

Student ID: dawn.steele@myscu.edu, Grades: A, Marks: 91

Student ID: debbie.henderson@myscu.edu, Grades: B, Marks: 85

Student ID: debra.wang@myscu.edu, Grades: C, Marks: 77

Student ID: denise.webster@myscu.edu, Grades: B, Marks: 88

Student ID: diana.moore@myscu.edu, Grades: C, Marks: 75

Student ID: donald.bailey@myscu.edu, Grades: D, Marks: 62

Student ID: donna.massey@myscu.edu, Grades: C, Marks: 72

Student ID: dwayne.gonzalez@myscu.edu, Grades: C, Marks: 71

Student ID: edward.brown@myscu.edu, Grades: A, Marks: 92

Student ID: edward.murphy@myscu.edu, Grades: A, Marks: 94

Student ID: edward.vaughn@myscu.edu, Grades: C, Marks: 77

Student ID: elizabeth.duran@myscu.edu, Grades: B, Marks: 86

Student ID: elizabeth.may@myscu.edu, Grades: B, Marks: 89

Student ID: elizabeth.robinson@myscu.edu, Grades: C, Marks: 74

Student ID: emily.nelson@myscu.edu, Grades: B, Marks: 82

Student ID: erik.watson@myscu.edu, Grades: D, Marks: 66

Student ID: erika.mitchell@myscu.edu, Grades: A, Marks: 94

Student ID: erin.herrera@myscu.edu, Grades: F, Marks: 49

Student ID: erin.wilson@myscu.edu, Grades: A, Marks: 100

Student ID: frank.gray@myscu.edu, Grades: F, Marks: 35

Student ID: gabriella.abbott@myscu.edu, Grades: B, Marks: 86

Student ID: george.porter@myscu.edu, Grades: C, Marks: 79

Student ID: glen.barr@myscu.edu, Grades: B, Marks: 81

Student ID: gregory.maxwell@myscu.edu, Grades: B, Marks: 89

Student ID: haley.lyons@myscu.edu, Grades: A, Marks: 94

Student ID: jacob.gill@myscu.edu, Grades: D, Marks: 61

Student ID: james.cruz@myscu.edu, Grades: A, Marks: 98

Student ID: james.herman@myscu.edu, Grades: C, Marks: 73

Student ID: james.perez@myscu.edu, Grades: C, Marks: 75

Student ID: janet.williams@myscu.edu, Grades: C, Marks: 70

Student ID: jeffrey.smith@myscu.edu, Grades: C, Marks: 76

Student ID: jennifer.hicks@myscu.edu, Grades: B, Marks: 86

Student ID: jennifer.malone@myscu.edu, Grades: C, Marks: 74

Student ID: jennifer.ortiz@myscu.edu, Grades: A, Marks: 99

Student ID: jennifer.reed@myscu.edu, Grades: C, Marks: 72

Student ID: jesse.benson@myscu.edu, Grades: D, Marks: 63

Student ID: jessica.sheppard@myscu.edu, Grades: A, Marks: 98

Student ID: jill.porter@myscu.edu, Grades: B, Marks: 86

Student ID: jody.meza@myscu.edu, Grades: D, Marks: 65

Student ID: john.bruce@myscu.edu, Grades: B, Marks: 85

Student ID: john.charles@myscu.edu, Grades: D, Marks: 65

Student ID: john.reid@myscu.edu, Grades: C, Marks: 71

Student ID: joseph.wright@myscu.edu, Grades: A, Marks: 93

Student ID: julia.moore@myscu.edu, Grades: B, Marks: 88

Student ID: julie.alvarez@myscu.edu, Grades: A, Marks: 97

Student ID: julie.obrien@myscu.edu, Grades: A, Marks: 92

Student ID: julie.thornton@myscu.edu, Grades: D, Marks: 65

Student ID: julie.wilson@myscu.edu, Grades: D, Marks: 67

Student ID: kaitlyn.carroll@myscu.edu, Grades: B, Marks: 87

Student ID: kathryn.jimenez@myscu.edu, Grades: A, Marks: 95

Student ID: katie.anderson@myscu.edu, Grades: D, Marks: 67

Student ID: keith.landry@myscu.edu, Grades: D, Marks: 69

Student ID: kevin.cabrera@myscu.edu, Grades: A, Marks: 97

Student ID: kristin.rodriguez@myscu.edu, Grades: A, Marks: 96

Student ID: kristin.sanchez@myscu.edu, Grades: D, Marks: 63

Student ID: krystal.perez@myscu.edu, Grades: D, Marks: 65

Student ID: kyle.ortiz@myscu.edu, Grades: D, Marks: 66

Student ID: kyle.ward@myscu.edu, Grades: D, Marks: 60

Student ID: laura.perez@myscu.edu, Grades: A, Marks: 95

Student ID: lindsay.francis@myscu.edu, Grades: D, Marks: 65

Student ID: lindsey.harrison@myscu.edu, Grades: A, Marks: 92

Student ID: lisa.hughes@myscu.edu, Grades: B, Marks: 80

Student ID: lisa.pearson@myscu.edu, Grades: C, Marks: 78

Student ID: maria.montgomery@myscu.edu, Grades: F, Marks: 56

Student ID: marilyn.jimenez@myscu.edu, Grades: D, Marks: 61

Student ID: mary.aguilar@myscu.edu, Grades: A, Marks: 94

Student ID: mary.dunn@myscu.edu, Grades: A, Marks: 96

Student ID: mary.stephenson@myscu.edu, Grades: D, Marks: 65

Student ID: matthew.klein@myscu.edu, Grades: B, Marks: 86

Student ID: megan.villegas@myscu.edu, Grades: A, Marks: 98

Student ID: megan.davis@myscu.edu, Grades: D, Marks: 66

Student ID: melanie.gibson@myscu.edu, Grades: B, Marks: 89

Student ID: melissa.cannon@myscu.edu, Grades: B, Marks: 86

Student ID: melissa.gilbert@myscu.edu, Grades: D, Marks: 64

Student ID: melissa.prince@myscu.edu, Grades: A, Marks: 92

Student ID: michael.brown@myscu.edu, Grades: D, Marks: 62

Student ID: michael.green@myscu.edu, Grades: C, Marks: 73

Student ID: michelle.rivera@myscu.edu, Grades: B, Marks: 80

Student ID: michelle.wright@myscu.edu, Grades: F, Marks: 18

Student ID: mitchell.griffith@myscu.edu, Grades: C, Marks: 71

Student ID: mitchell.hoffman@myscu.edu, Grades: B, Marks: 86

Student ID: mitchell.ramos@myscu.edu, Grades: D, Marks: 63

Student ID: monique.wallace@myscu.edu, Grades: B, Marks: 88

Student ID: natasha.decker@myscu.edu, Grades: B, Marks: 81

Student ID: nicholas.arnold@myscu.edu, Grades: F, Marks: 5

Student ID: nicholas.tran@myscu.edu, Grades: B, Marks: 89

Student ID: paul.hoffman@myscu.edu, Grades: D, Marks: 62

Student ID: paul.ray@myscu.edu, Grades: C, Marks: 70

Student ID: philip.larson@myscu.edu, Grades: C, Marks: 75

Student ID: rachel.wallace@myscu.edu, Grades: A, Marks: 90

Student ID: randy.watson@myscu.edu, Grades: A, Marks: 97

Student ID: richard.donovan@myscu.edu, Grades: D, Marks: 62

Student ID: robert.bauer@myscu.edu, Grades: C, Marks: 77

Student ID: robert.dunn@myscu.edu, Grades: C, Marks: 76

Student ID: robert.kirby@myscu.edu, Grades: A, Marks: 100

Student ID: robert.peterson@myscu.edu, Grades: C, Marks: 77

Student ID: robert.silva@myscu.edu, Grades: D, Marks: 64

Student ID: ronald.norris@myscu.edu, Grades: D, Marks: 66

Student ID: ronald.smith@myscu.edu, Grades: C, Marks: 74

Student ID: sabrina.phillips@myscu.edu, Grades: D, Marks: 60

Student ID: samantha.atkins@myscu.edu, Grades: A, Marks: 96

Student ID: samantha.bright@myscu.edu, Grades: C, Marks: 73

Student ID: samuel.wolfe@myscu.edu, Grades: C, Marks: 79

Student ID: sarah.combs@myscu.edu, Grades: A, Marks: 91

Student ID: scott.mills@myscu.edu, Grades: A, Marks: 96

Student ID: scott.nelson@myscu.edu, Grades: B, Marks: 83

Student ID: shane.smith@myscu.edu, Grades: D, Marks: 68

Student ID: sharon.collins@myscu.edu, Grades: D, Marks: 60

Student ID: shelby.byrd@myscu.edu, Grades: C, Marks: 79
Student ID: shelley.woods@myscu.edu, Grades: C, Marks: 74
Student ID: sierra.wagner@myscu.edu, Grades: C, Marks: 73
Student ID: stacy.rodriguez@myscu.edu, Grades: A, Marks: 97
Student ID: stanley.morris@myscu.edu, Grades: D, Marks: 60
Student ID: stephanie.key@myscu.edu, Grades: A, Marks: 93
Student ID: stephanie.sanders@myscu.edu, Grades: C, Marks: 72
Student ID: steven.bishop@myscu.edu, Grades: D, Marks: 62
Student ID: susan.sanders@myscu.edu, Grades: D, Marks: 67
Student ID: tammy.dalton@myscu.edu, Grades: C, Marks: 79
Student ID: tanner.anderson@myscu.edu, Grades: A, Marks: 92
Student ID: terrance.franco@myscu.edu, Grades: C, Marks: 71
Student ID: theresa.long@myscu.edu, Grades: C, Marks: 76
Student ID: thomas.mueller@myscu.edu, Grades: F, Marks: 57
Student ID: thomas.santana@myscu.edu, Grades: C, Marks: 72
Student ID: todd.hardy@myscu.edu, Grades: B, Marks: 82
Student ID: tracy.whitehead@myscu.edu, Grades: D, Marks: 68
Student ID: troy.miller@myscu.edu, Grades: C, Marks: 70
Student ID: victoria.phillips@myscu.edu, Grades: A, Marks: 99
Student ID: wendy.rice@myscu.edu, Grades: F, Marks: 1
Student ID: william.bryant@myscu.edu, Grades: B, Marks: 89

Do you want to see statistics? (yes/no): no

Professor Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Modify My Details

6. Add/Delete/Modify Course

7. Add/Delete/Modify Grades

8. Generate Grade Report

9. Return to main menu

Enter your choice: 5

1. Modify professor name

2. Modify professor rank

3. Modify course IDs

Enter your choice: 1

Enter the new name: JJ

Name updated successfully.

Professor data saved to Professor.csv successfully

Professor Menu:

1. Display Student Records

2. Display Professor Records

3. Display Course Records

4. Display Grades Records

5. Modify My Details

6. Add/Delete/Modify Course

7. Add/Delete/Modify Grades

8. Generate Grade Report

9. Return to main menu

Enter your choice: 6

Add/Delete/Modify Course Menu:

1. Add new course

2. Delete course

3. Modify course details

4. Return to previous menu

Enter your choice: 2

Enter the course ID you want to delete: DATA205

Professor JJ does not teach Course ID DATA205. Deletion not allowed.

Professor Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Modify My Details
6. Add/Delete/Modify Course
7. Add/Delete/Modify Grades
8. Generate Grade Report
9. Return to main menu

Enter your choice: 7

Add/Delete/Modify Grades Menu:

1. Add new grade
2. Delete grade
3. Modify grade details
4. Return to previous menu

Enter your choice: 2

Enter the student ID of the grade to be deleted: nicholas.arnold@myscu.edu

Enter the course ID of the grade to be deleted: DATA204

Grade deleted successfully.

Professor Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records

4. Display Grades Records
5. Modify My Details
6. Add/Delete/Modify Course
7. Add/Delete/Modify Grades
8. Generate Grade Report
9. Return to main menu

Enter your choice: 8

Generate Grade Report Menu:

1. Generate grade report for all my courses
2. Generate grade report for a specific course I taught
3. Return to previous menu

Enter your choice: 1

Grade Report for JJ (Professor ID: jeffery.wagner@myscu.edu)

Course ID: DATA214

Statistics:

Total students graded: 148

Average Grade: 77.78

Median Grade: 77.00

Highest Grade: 100.0

Lowest Grade: 9.0

Course ID: DATA204

Statistics:

Total students graded: 168

Average Grade: 77.35

Median Grade: 79.00

Highest Grade: 100.0

Lowest Grade: 0.0

Course ID: DATA215

Statistics:

Total students graded: 150

Average Grade: 75.67

Median Grade: 81.00

Highest Grade: 100.0

Lowest Grade: 5.0

Professor Menu:

1. Display Student Records
2. Display Professor Records
3. Display Course Records
4. Display Grades Records
5. Modify My Details
6. Add/Delete/Modify Course
7. Add/Delete/Modify Grades
8. Generate Grade Report
9. Return to main menu

Enter your choice: 9

1. Go to main menu
2. Change password
3. Logout

Enter your choice: 3

Student:

(data) (base) dingyuyao@teius-MacBook-Pro Main Code % /opt/anaconda3/envs/data/bin/python
"/Users/di

ngyuyao/Documents/SJSU/Spring2025/DATA200/Lab 1/Main Code/main.py"

```
=====
Welcome to CheckMyGrade APP!
=====
```

Enter your Email ID: amanda.dudley@myscu.edu

Enter you password:

Login successful!

1. Go to main menu
2. Change password
3. Logout

Enter your choice: 1

Student Menu:

1. Display My Records
2. Modify My Details
3. Check My Grades
4. Check My Marks
5. Generate My Grade Report
6. Discover Courses
7. Discover Professors
8. Return to main menu

Enter your choice: 1

Student ID: amanda.dudley@myscu.edu, Name: Amanda Dudley

Course ID: DATA202

Student Menu:

1. Display My Records
2. Modify My Details
3. Check My Grades
4. Check My Marks
5. Generate My Grade Report
6. Discover Courses
7. Discover Professors
8. Return to main menu

Enter your choice: 2

1. Modify student's first name.
2. Modify student's last name.
3. Modify student's course IDs.

Enter your choice: 2

Enter the new last name: Dud

Last name updated successfully.

Student data saved to Student.csv successfully.

Student Menu:

1. Display My Records
2. Modify My Details
3. Check My Grades
4. Check My Marks
5. Generate My Grade Report
6. Discover Courses
7. Discover Professors
8. Return to main menu

Enter your choice: 3

1. Check grades for all courses you took.
2. Check grades for a specific course you took.

Enter you choice: 1

Grades for Amanda Dud:

Course ID: DATA202, Grade: F

Student Menu:

1. Display My Records
2. Modify My Details
3. Check My Grades
4. Check My Marks
5. Generate My Grade Report
6. Discover Courses
7. Discover Professors
8. Return to main menu

Enter your choice: 4

1. Check marks for all courses you took.
2. Check marks for a specific course you took.

Enter you choice: 1

Grades for Amanda Dud:

Course ID: DATA202, Grade: F, Mark: 36

Student Menu:

1. Display My Records
2. Modify My Details
3. Check My Grades
4. Check My Marks
5. Generate My Grade Report
6. Discover Courses
7. Discover Professors

8. Return to main menu

Enter your choice: 5

Grade Report for Amanda Dud (Student ID: amanda.dudley@myscu.edu)

Course ID: DATA202, Grade: F, Marks: 36

Statistics:

Total Courses Enrolled: 1

Average Grade: 36.00

Median Grade: 36.00

Highest Grade: 36.0

Lowest Grade: 36.0

Student Menu:

1. Display My Records

2. Modify My Details

3. Check My Grades

4. Check My Marks

5. Generate My Grade Report

6. Discover Courses

7. Discover Professors

8. Return to main menu

Enter your choice: 6

Discover Courses Menu:

1. Display all courses

2. Display chosen course details

3. Return to previous menu

Enter your choice: 2

Enter the course ID: DATA208

Course ID: DATA208, Course Name: Game Development, Description: Learn to design and develop video games.

Time taken to lookup the course: 0.000102 seconds

Student Menu:

1. Display My Records
2. Modify My Details
3. Check My Grades
4. Check My Marks
5. Generate My Grade Report
6. Discover Courses
7. Discover Professors
8. Return to main menu

Enter your choice: 7

Discover Professors Menu:

1. Display all professors
2. Display chosen professor details
3. Return to previous menu

Enter your choice: 1

Enter the sort by (professor_id, name): name

Enter True, sort in descending order, enter False, sort in ascending order): True

Displaying all professors records (sorted by name):

Professor ID: susan.rogers@myscu.edu, Name: Susan Rogers, Rank: Senior Professor

Course ID: DATA206

Course ID: DATA213

Professor ID: melanie.munoz@myscu.edu, Name: Melanie Munoz, Rank: Assistant Professor

Course ID: DATA209

Course ID: DATA219

Course ID: DATA203

Professor ID: matthew.moore@myscu.edu, Name: Matthew Moore, Rank: Senior Professor

Course ID: DATA200

Professor ID: lisa.smith@myscu.edu, Name: Lisa Smith, Rank: Associate Professor

Course ID: DATA216

Professor ID: linda.wolfe@myscu.edu, Name: Linda Wolfe, Rank: Associate Professor

Course ID: DATA210

Course ID: DATA207

Professor ID: jeffrey.lawrence@myscu.edu, Name: Jeffrey Lawrence, Rank: Senior Professor

Course ID: DATA205

Professor ID: jeffery.wagner@myscu.edu, Name: Jeffery Wagner, Rank: Senior Professor

Course ID: DATA214

Course ID: DATA204

Course ID: DATA215

Professor ID: debra.gardner@myscu.edu, Name: Debra Gardner, Rank: Senior Professor

Course ID: DATA201

Course ID: DATA217

Course ID: DATA208

Professor ID: christopher.davis@myscu.edu, Name: Christopher Davis, Rank: Associate Professor

Course ID: DATA211

Course ID: DATA202

Professor ID: anthony.gonzalez@myscu.edu, Name: Anthony Gonzalez, Rank: Senior Professor

Course ID: DATA212

Course ID: DATA218

Student Menu:

1. Display My Records
2. Modify My Details
3. Check My Grades
4. Check My Marks
5. Generate My Grade Report
6. Discover Courses
7. Discover Professors
8. Return to main menu

Enter your choice: 8

1. Go to main menu
2. Change password
3. Logout

Enter your choice: 3