IS 407: Assignment 2

Due by Sunday, July 10, 2022 11:59PM

Complete the homework assignment in Python.

Submit both your .ipynb syntax file and a HTML of your homework assignment.

1. Read in Student_Grade_Prediction2.csv as Students_df and create a database called Students. Remember that you also need to create a cursor to execute the commands below.

2. Select all the students who scored less than or equal to 12 on the first exam (G1) ordered in descending order by the first exam scores.

3. Select students whose mothers work as teachers and fathers who work in services.

4. Select all the students and create a count variable for students who are in extracurricular activities and have internet.

5. Create a new table called Subjects, this table represents the subjects taken in school. Include the following variables (appears Variable_Name (Data Type)): Student_ID (INT), Algebra (INT), American_History (INT), English_Lit (INT), Biology (INT), and Music (INT).

6. Include the following row of data into your new database: ('1', '0', '0', '1', '1', '1').

7. Include more_data into the new table, Subjects= [('2', '1', '1', '1', '0', '0'), ('3', '1', '0', '1', '1', '1'), ('4', '1', '1', '0', '0', '0'), ('5', '1', '1', '1', '1', '1')]

8. Update Subjects table so Algebra is a 1 when Student_ID is 1.

9. Student 4 took the semester off. Delete Student 4 from the subjects database.

10. Join the two tables, Students and Subjects using the primary key of ID for Students table and Student_ID for the Subjects table.