**2021-2022 SPRING SEMESTER**

|  |  |
| --- | --- |
| **Hours** | **Scores** |
| 2.5 | 21 |
| 5.1 | 47 |
| 3.2 | 27 |
| 8.5 | 75 |
| 3.5 | 30 |
| 1.5 | 20 |
| 9.2 | 88 |
| 5.5 | 60 |
| 8.3 | 81 |
| 2.7 | 25 |
| 7.7 | 85 |
| 5.9 | 62 |
| 4.5 | 41 |
| 3.3 | 42 |
| 1.1 | 17 |
| 8.9 | 95 |
| 2.5 | 30 |
| 1.9 | 24 |
| 6.1 | 67 |
| 7.4 | 69 |
| 2.7 | 30 |
| 4.8 | 54 |
| 3.8 | 35 |
| 6.9 | 76 |
| 7.8 | 86 |

**CSE443 MACHINE LEARNING LECTURE QUIZ-1**

In 2020-2021 Spring Semester 25 Students took **Machine Learning Lecture** and depending on t heir study hours, the final exam results are depicted in the following table. By using this table, please make a Linear Regression Analysis and give your calculations for the following questions.

1. Plot the Graph of these points and Linear Regression Line in a Excel Sheet
2. Calulate the Linear Regression Equation as follows

**Scores = A\*Hours + B // calculate the constants of A and B**

1. Calculate the Sum of Square error for this equation.
2. In this semester there are Three Students who aim to study with the following Hours. Please expect their Final Score depending on the previous calculations

|  |  |
| --- | --- |
| **Hours** | **Scores** |
| 1.6 | ?? |
| 5.7 | ?? |
| 2.5 | ?? |

* You Need to send your Excel File as your Solution
* First Three Student will take **% 20 Bonus**
* Duration is 30 Minutes. Please Obey the time limits.