**Assignment 01**

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ID Number:***[20200601]***

Rules:

1. Download this assignment in word format and edit it to add your answer.
2. After answering, save your assignment in PDF format.
3. Rename the file in the format: ID Number\_ASG01\_MLDLS. *Example 05\_ASG01\_MLDLS*

*Question 1:* (20 Points)

For the following y and y’, find value of loss function

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **y** | 12 | 14 | 17 | 25 | 29 | 34 | 35 | 40 | 42 |
| **y’** | 10.5 | 12 | 14 | 21 | 26 | 31 | 34 | 40 | 40 |

*Answer 1:*

|  |
| --- |
| 54.25 |

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*Question 2:*  (50 Points)Please download the dataset using the given link and create a multivariate linear regression model to predict *profits* depending on *investments* of startups.

Split the data in ratio 9:1 in proportion to train: test.

Link for the dataset: <https://1drv.ms/u/s!Ai33XNwSq5w1iUCsc9aF0JkGAA3E?e=Ho8kgQ>  
  
*Answer 2:*

Link for your code:

https://stdntpartnersmy.sharepoint.com/:u:/g/personal/arpit\_sharma\_studentpartner\_com/ESWMMqj0VgJDuSfm4Ydu2WgByElFsZQz8sGk\_\_1Xp9yu9g?e=mAj0of

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*Question 3:* (30 Points)

Come up with an amazing idea where regression can be used around you or in school or companies or hospitals, etc.  
  
*Answer 3:*  
Title of idea: predicting the faults in wind turbine  
Description/Motivation [80-100 Words]:  
*Since, from my second year of bachelors, I was curious about wind turbine and fault analysis in wind turbine model, so I thought of an idea to predict the faults in wind turbine by regression or by any other implementation.*