SCS 414 Machine Learning Group Assignment

Given below are some common Machine Learning Algorithms:

- 1. Linear Regression
- 2. Logistic Regression
- 3. Support Vector Machines
- 4. K-Means Clustering
- 5. Random Forest

For each of the following Machine Learning Algorithms:

- (i) Explain how it's works, and its suitable area of application
- (ii) Give a good example on its use in line with the explanation in (i) above, and possible advantages and disadvantages

	Algorithm	Group to do
1	Linear Regression – Part (i)	Group 1
2	Linear Regression – Part (ii)	Group 2
3	Logistic Regression – Part (i)	Group 3
4	Logistic Regression – Part (ii)	Group 4
5	Support Vector Machines – Part (i)	Group 5
6	Support Vector Machines – Part (ii)	Group 6
7	K-Means Clustering – Part (i)	Group 7
8	K-Means Clustering – Part (ii)	Group 8
9	Random Forest – Part (i)	Group 9
10	Random Forest – Part (ii)	Group 10

NB: Each Group should

- 1. Prepare some few slides (Not more than 10 slides)
- 2. Identify one person to present on behalf of the group
- 3. Prepare a **PRINTED** document on the content of the Assignment (**not more than 5 pages**), to handed in during the presentation
- 4. Be ready to answer any question from the audience about their assignment (any one from the group can answer)
- 5. Be ready to **Present** their work on Monday 9th March 2020.
- 6. Present their work within 15 minutes (10 minutes for presenting and 5 minutes for questions)
- 7. The 2 groups assigned the same algorithm MUST work together for the continuity of their work

The presentation will done in the **order of the groups** starting from Group 1 to 10