DJS-Compute
Machine Learning
Assignment-5

Topic: Support Vector Machine

General Instructions:
- The deadline for completing the tasks is 4th January, 2023. A discussion session, addressing any doubts and task related topics, will be conducted in the following days.
- You can refer to additional online resources if needed .

Reference material:

- Intro to SVM and basic Python code for it
  - https://www.javatpoint.com/machine-learning-support-vector-machine-algorithm
  - https://www.youtube.com/watch?v=TtKF996oEl8

- What is GridSearchCV? What does it do?
  https://www.mygreatlearning.com/blog/gridsearchcv/#:~:text=GridSearchCV%20is%20a%20technique%20for,parameter%20values%2C%20predictions%20are%20made.

- GridSearchCV in SVM
  https://www.geeksforgeeks.org/svm-hyperparameter-tuning-using-gridsearchcv-ml/

- SVM Master Notebook
  https://colab.research.google.com/drive/1O9T_aH_MZrTnpyvYL4PPCap09AvM3MCa?usp=sharing

Task-1: Linear Support Vector Classifier (SVC)

https://colab.research.google.com/drive/1vokkbjsIl6muNJg9C3YnasbWy9qJNhyq?usp=sharing

Task-2: SVC and its kernels

https://colab.research.google.com/drive/1Zgnx9Q_O3gj4Ieame33pUYlvcnLHn1ob?usp=sharing

Task-3: SVR and its kernels

https://colab.research.google.com/drive/1XMM3rzkGrjfsZxx2jey6Es3oNjgMi6nI?usp=sharing