# SOC ASSIGNMENT-2

**GROUP:**

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**GIVEN:**

Perform LWR on Housing price dataset..
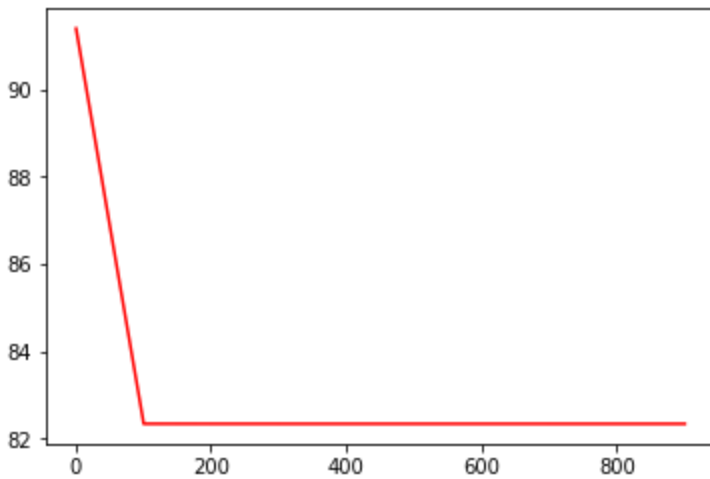
**PREDICTION:**

We need to predict HOUSE PRICE.

**NORMAL EQUATION:**

As tau decreases accuracy increases as tau defines the neighbourhood and as we search in its

nearer neighbourhood the accuracy increases.

**OUTPUT:**

tau :  1 => accuracy :  91.3853507002078
tau :  101 => accuracy :  82.33961020951273
tau :  201 => accuracy :  82.33879111458734
tau :  301 => accuracy :  82.33863782073276
tau :  401 => accuracy :  82.33858396175602
tau :  501 => accuracy :  82.33855898225467
tau :  601 => accuracy :  82.33854539605514
tau :  701 => accuracy :  82.33853719695044
tau :  801 => accuracy :  82.33853187207961
tau :  901 => accuracy :  82.33852821962357

**Tau vs Accuracy:**



**GRADIENT DESCENT:**

As tau decreases accuracy increases as tau defines the neighbourhood and as we search in its

nearer neighbourhood the accuracy increases.

**OUTPUT:**
tau : 1 => accuracy : 83.12141168366337
tau : 101 => accuracy : 82.33596842229981
tau : 201 => accuracy : 82.33516514969371
tau : 301 => accuracy : 82.33501481039936
tau : 401 => accuracy : 82.33496198899883
tau : 501 => accuracy : 82.33493749063274
tau : 601 => accuracy : 82.33492416609666
tau : 701 => accuracy : 82.33491612489469
tau : 801 => accuracy : 82.33491090256999
tau : 901 => accuracy : 82.33490732045125

**Tau vs Accuracy:**