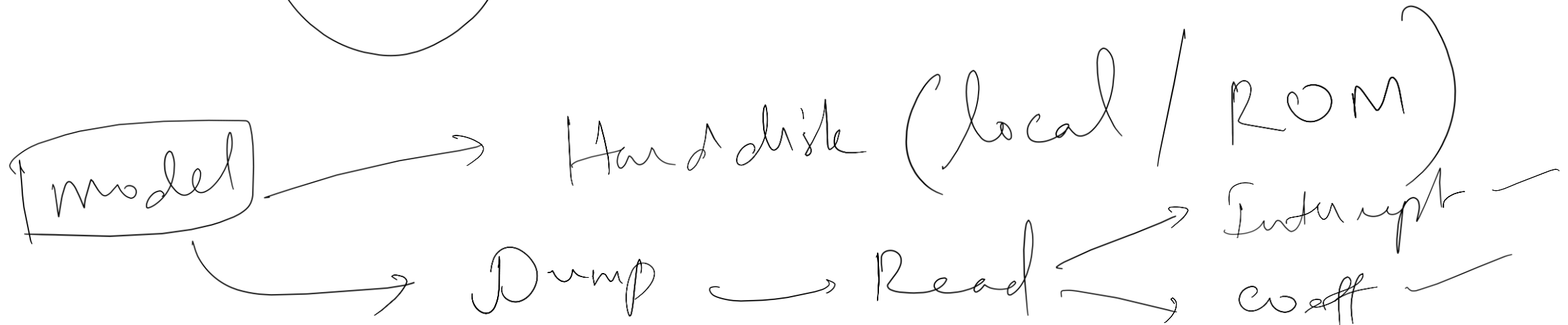
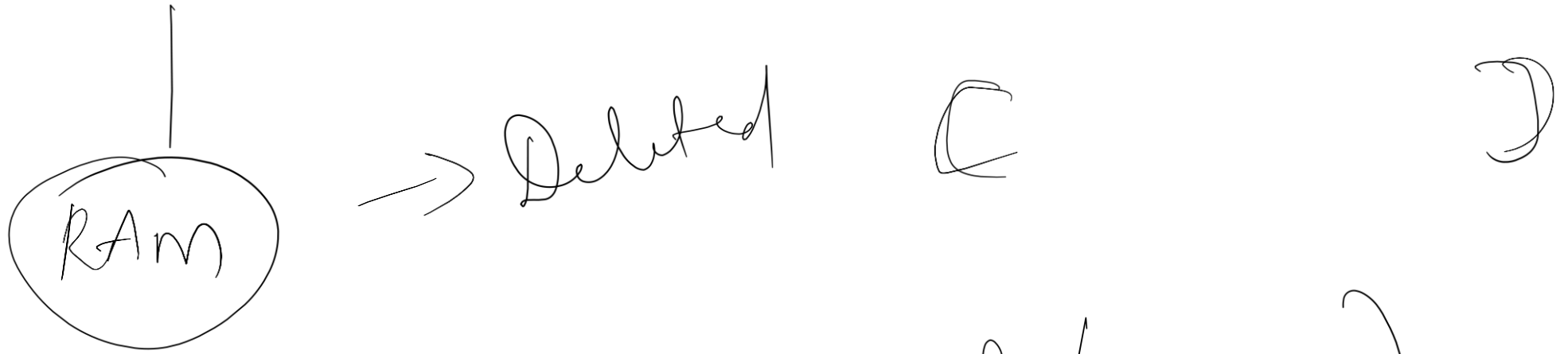


Jupyter notebook:

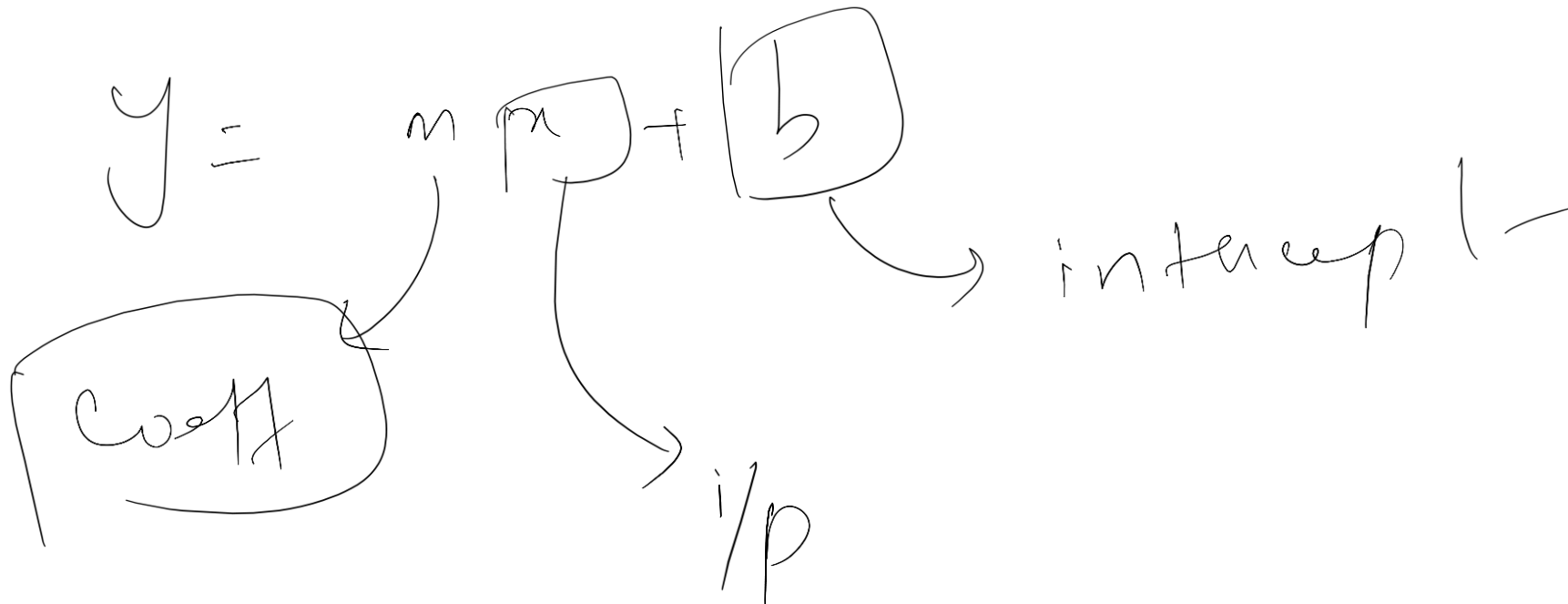
kernel is active (Running)

5 - 10 sec



pickle (file format)

Model



$x_1 \rightarrow \text{size}$
 $x_2 \rightarrow \text{ball}$
 x_3
 x_4
 x_5

$n = 100$

df.tail(10)

$$100 - 10 = 90$$



70
(Train)

20
(val)

pickle
(load)

model.predict(x_test)

model.fit(x_train, y_train)

(x_train, y_train)

MAPE = < 5

y_pred	y_test
0	0

Category: (str)

$$(25) + 50 = (75)$$

No-ordering (TW)

50 cities

OTHER (50)

Ordering

One	1
Two	2
Three	3
...	...
One hundred	100

Cities (50)

--

city_cat	city		

Frequency

1000

City 1 → 500

City 2 → 200

City 3 → 50

250

City - other

250

City 50

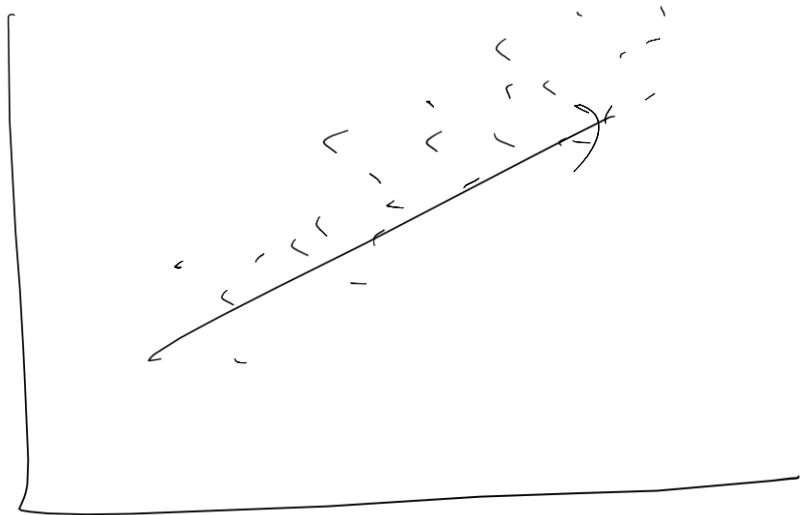
450

x_1	x_2	x_3	City - other

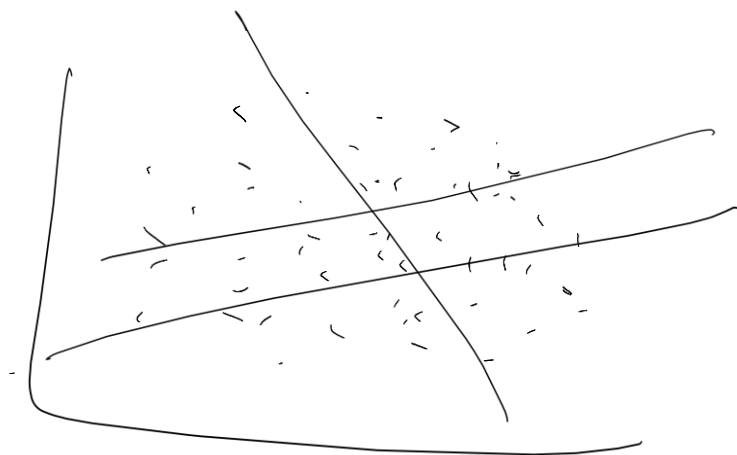
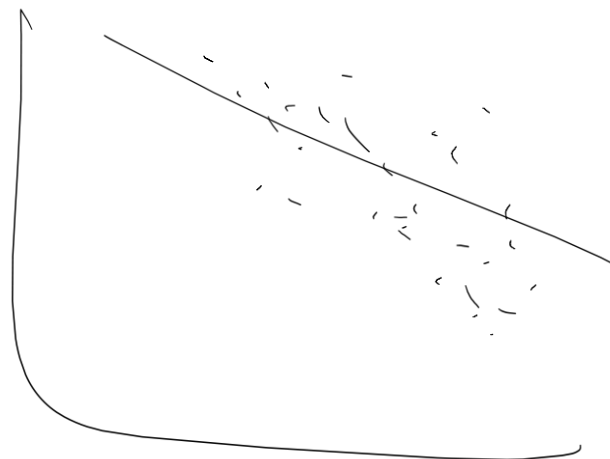
Let's get back

at ~~8~~: 7:40 IST
(pm)

Y



X



Age (y) (m) (d)

x_1 x_2 x_3 ... x_n

Multi-collinearity

~~X1~~ Variance Inflation Factor: - (VIF)

~~X2~~ ~~X3~~ ... ~~X6~~

X1 Size	Bed	Bath	.	-	-

~~Price~~

No target

i/p

Stra $\rightarrow R^2 = 0.9$

Bathra $\rightarrow R^2 = 0.2$

0.8

↓ ↑

✓ f

V if

	feature	Vif
✓	Size	10
✓	Bed	5
✗	Bath	27

(5 - 10)
Acceptable

Accept

²
R = ✓

maple ✓

VIF \Rightarrow $\frac{1}{1-R^2}$

(size?) \uparrow \downarrow

$$\frac{1}{1-0.9} = \frac{1}{0.01}$$

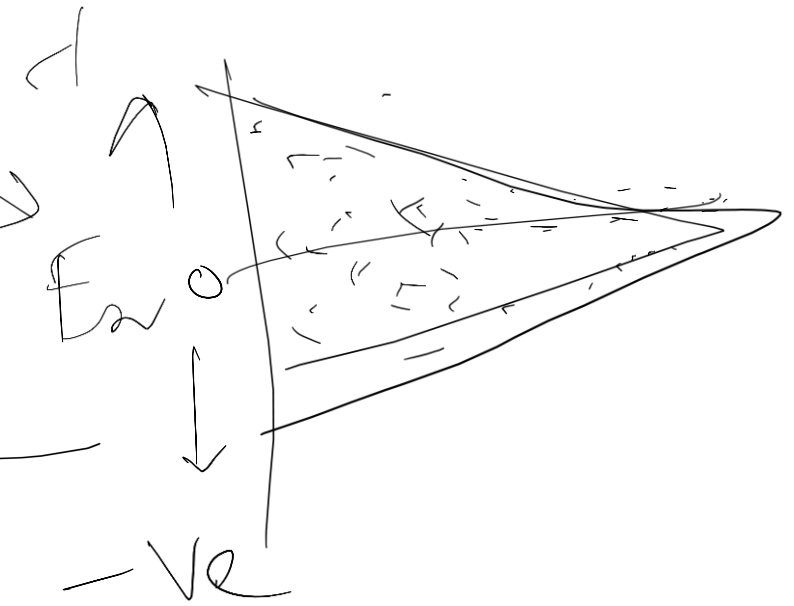
$$\leq 10$$

Beh

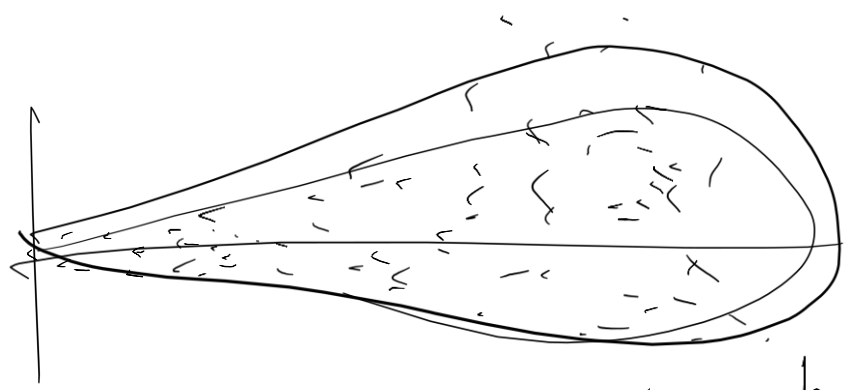
$$= \frac{1}{1-0.2} = \frac{1}{0.8} = \underline{\underline{1.25}} < 10$$

Y
from
O

LR



price

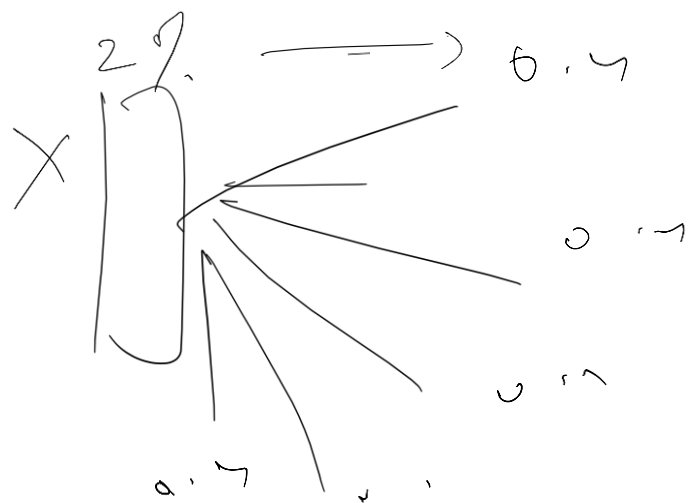
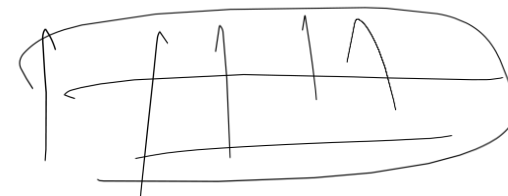


price

$$\frac{1}{1 - R^2} = 1$$

$$\frac{1}{0}$$

$\Rightarrow \text{inf}$



inp. NAW

