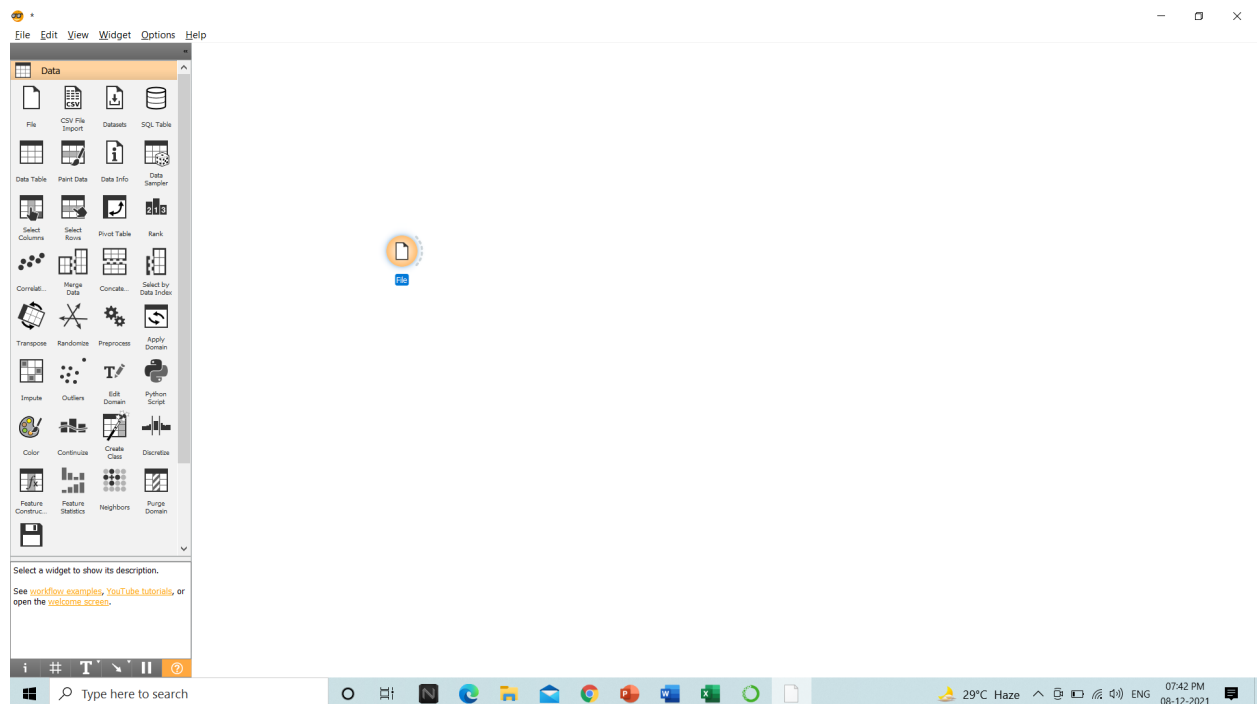
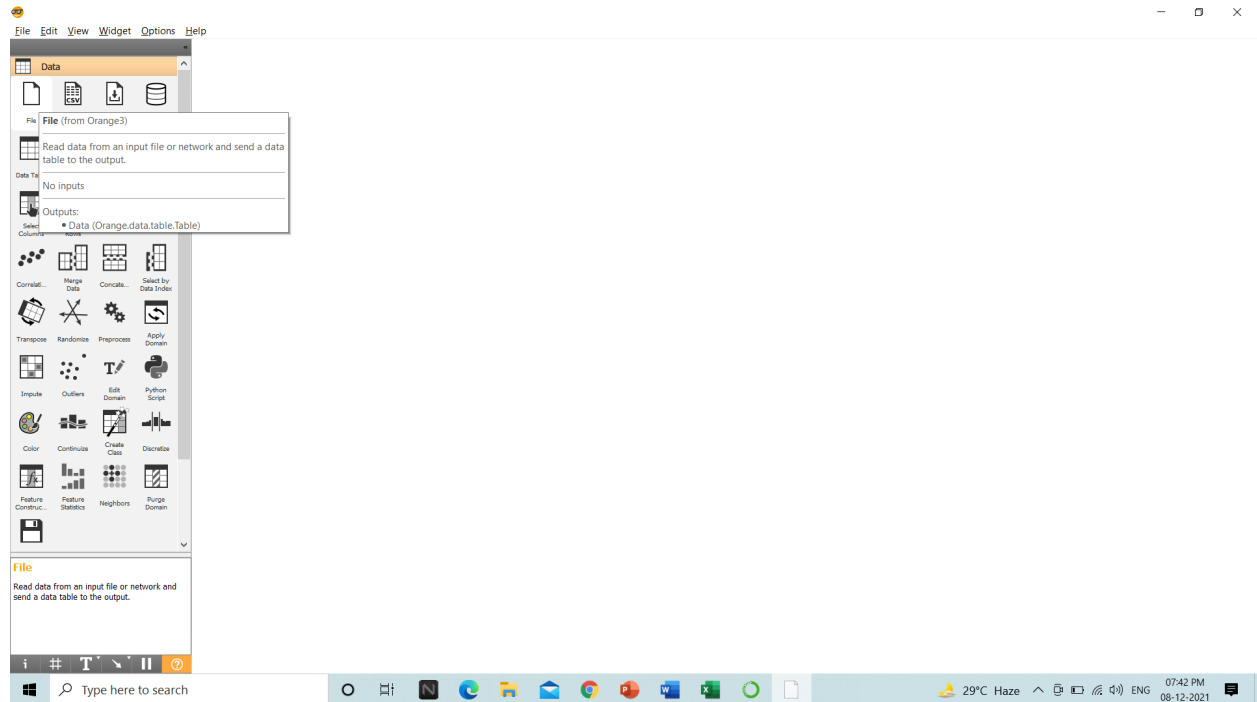


**Name:- Yash Kesharwani**  
**Class:- MSC CS Part 1**

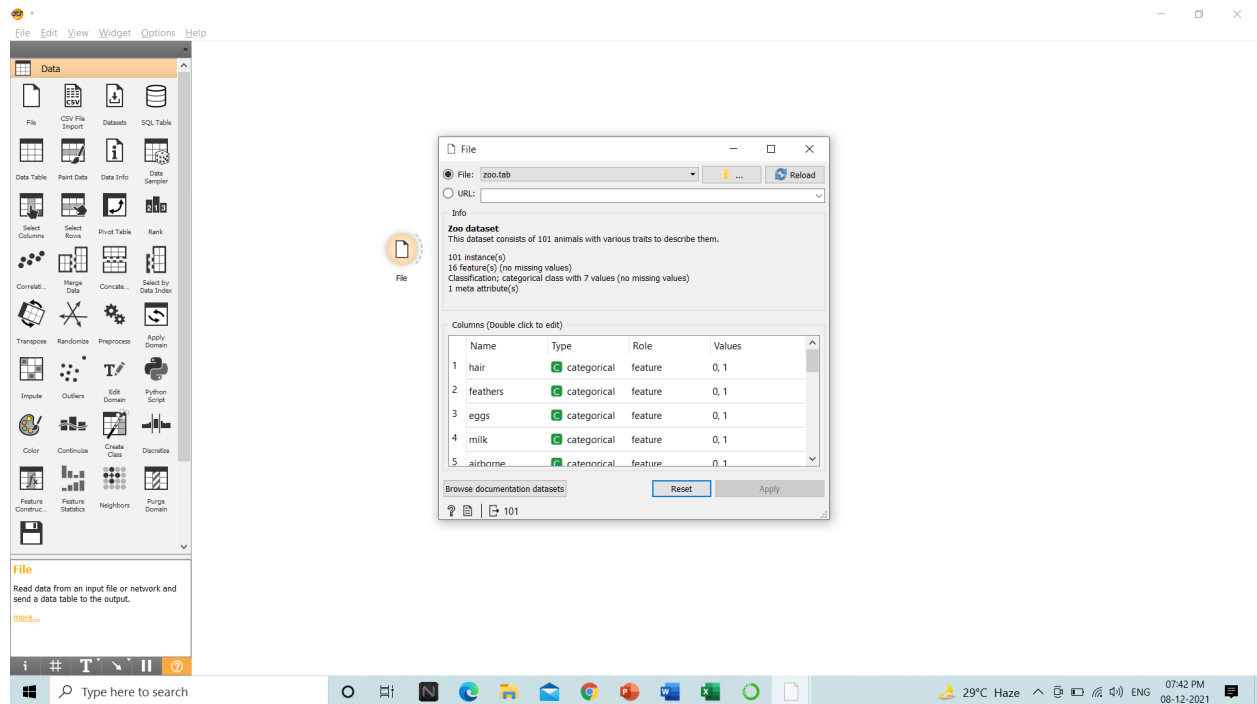
**Roll No:- 3**  
**Subject:- DWDM**

**Aim: Classification using orange tool.**

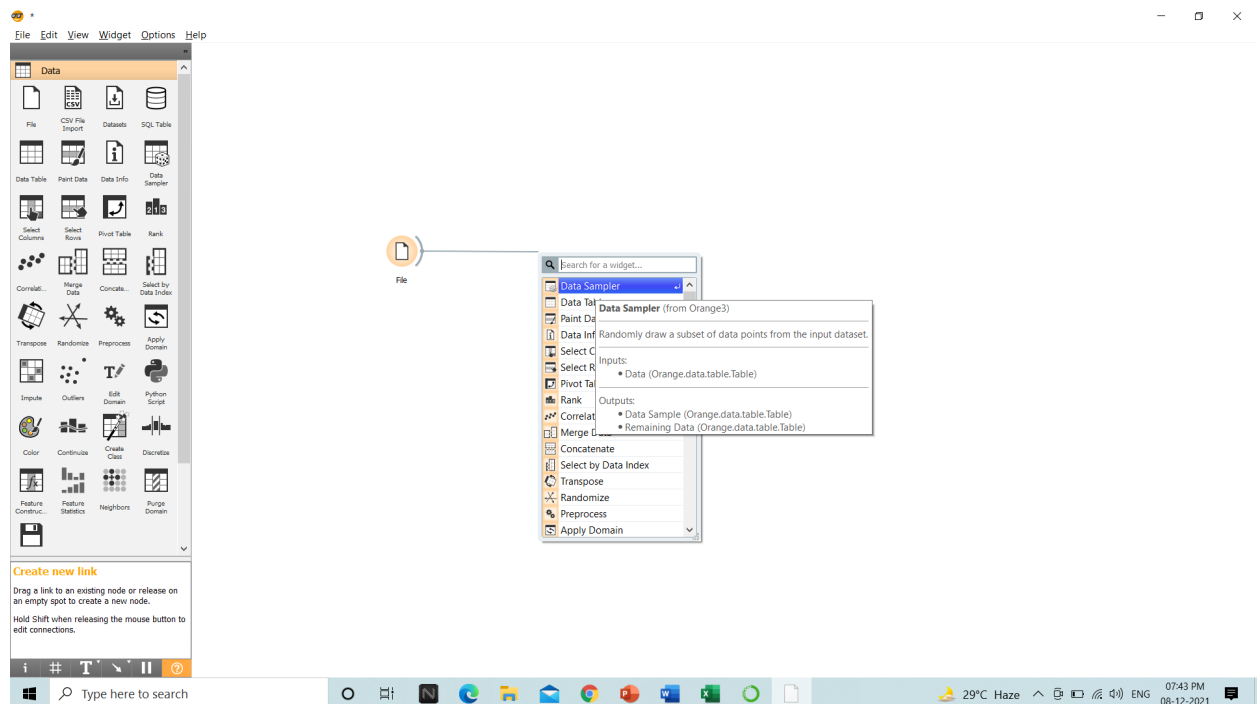
**Step1:-** We will be taking the available data files in order to predict the future things so open a new data file and drag the file just over it.



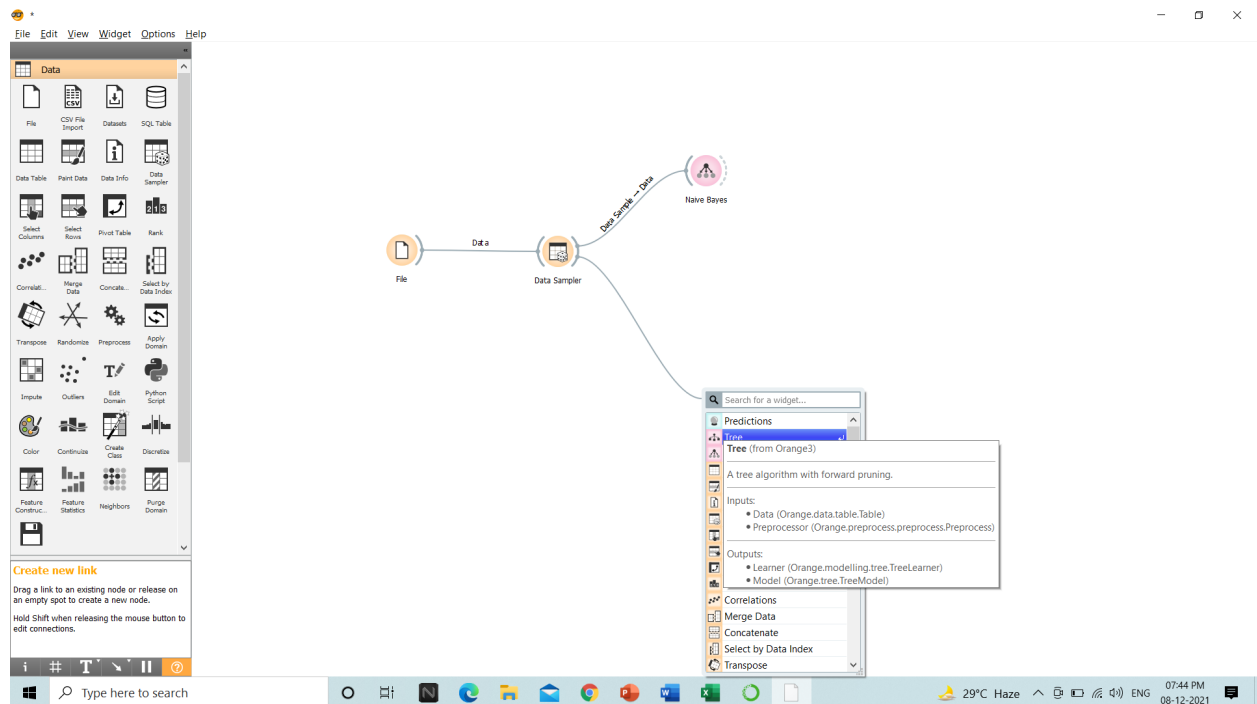
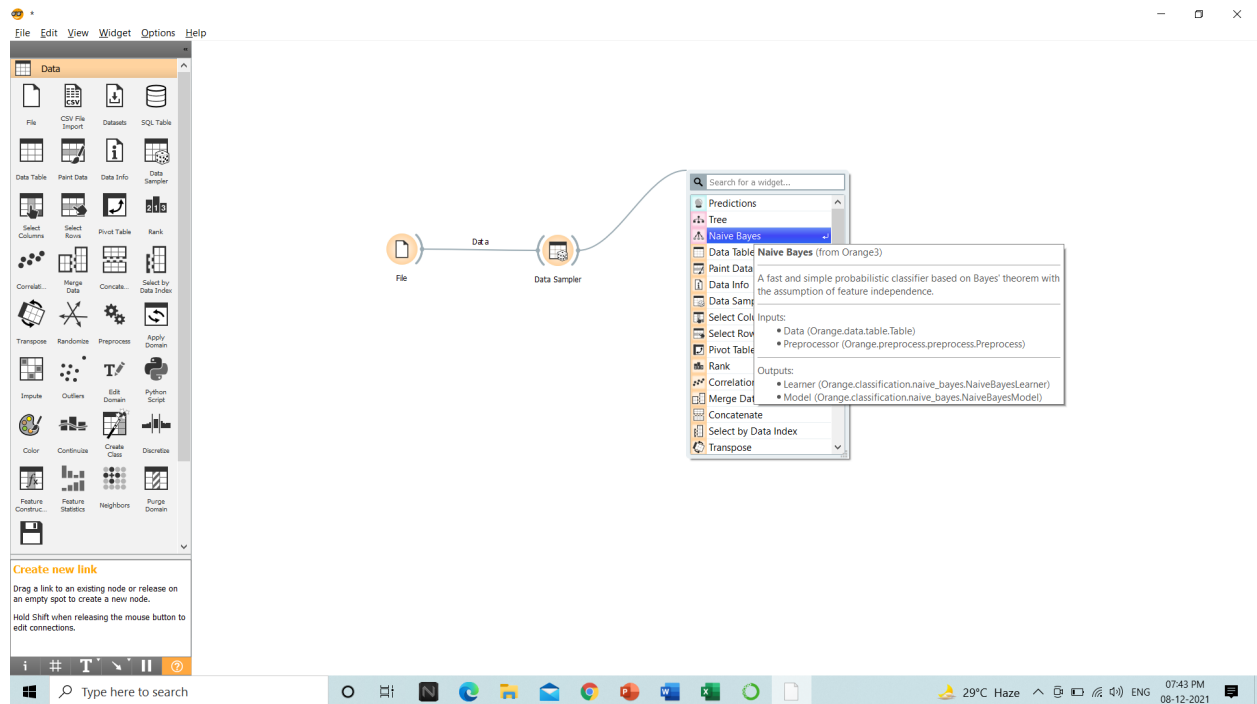
Step2:-Double click on the data file,from the dropdown list select the zoo.tab data file and close it.

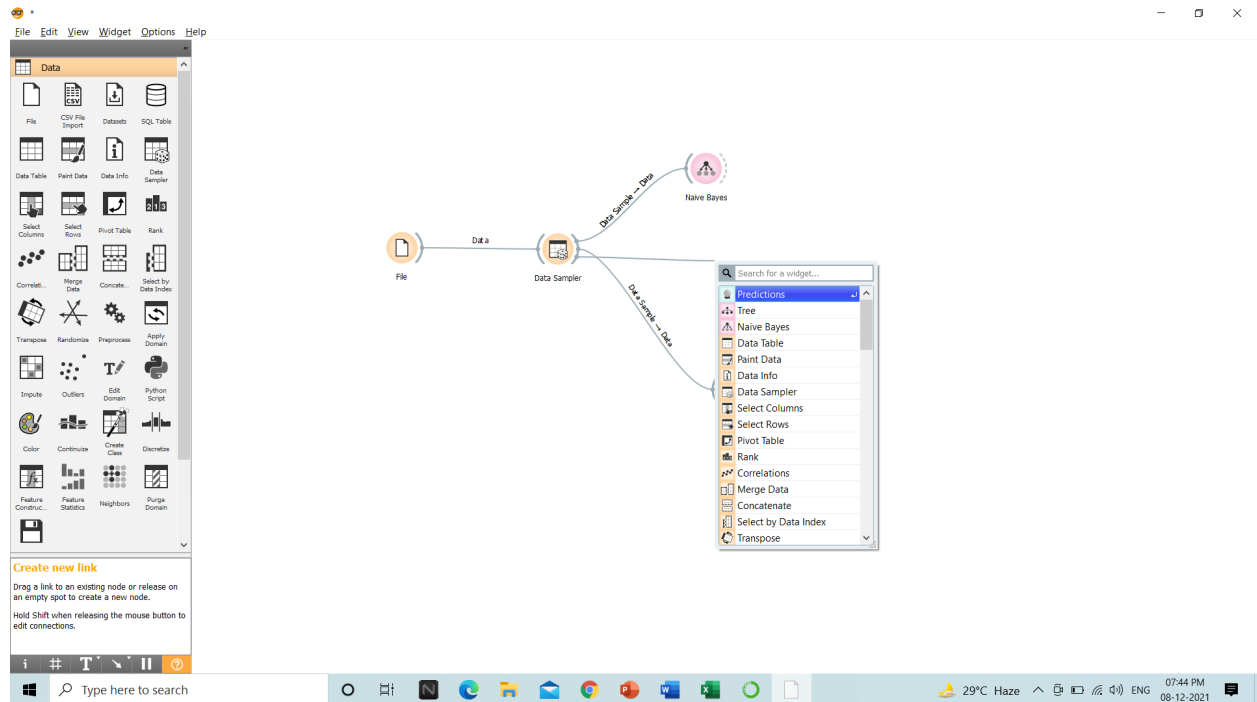


Step3:-Select the file and type data sampler.

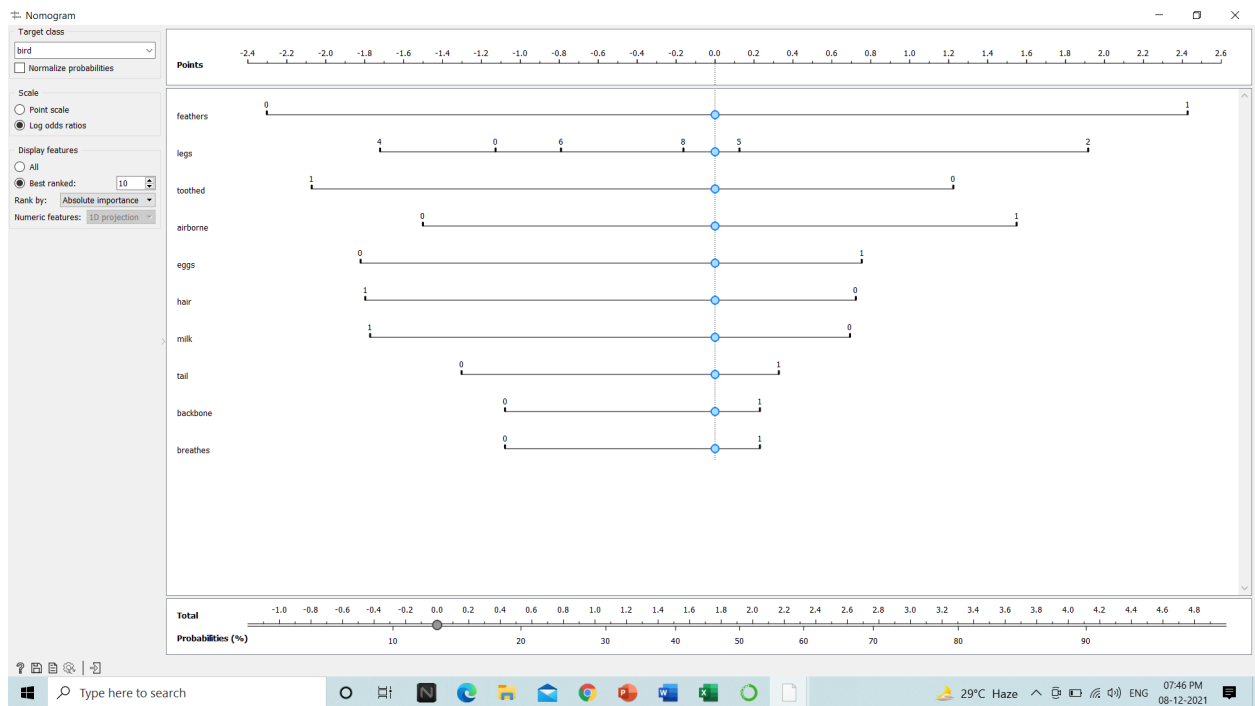
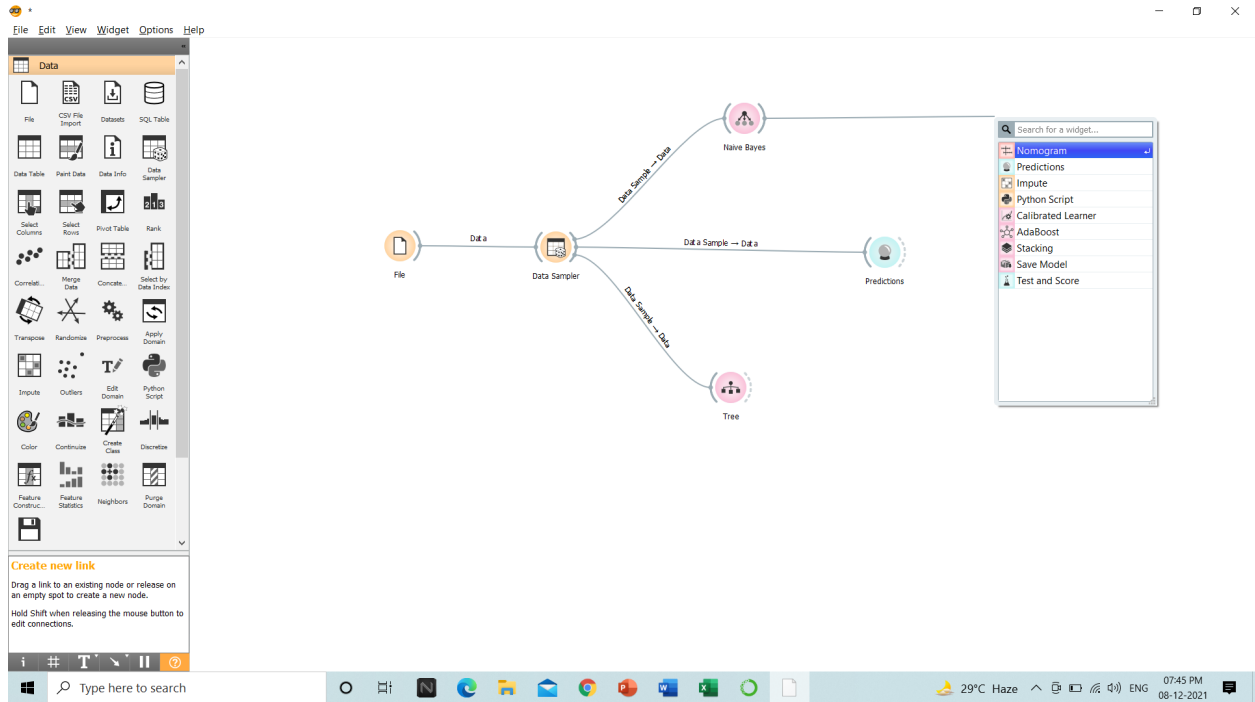


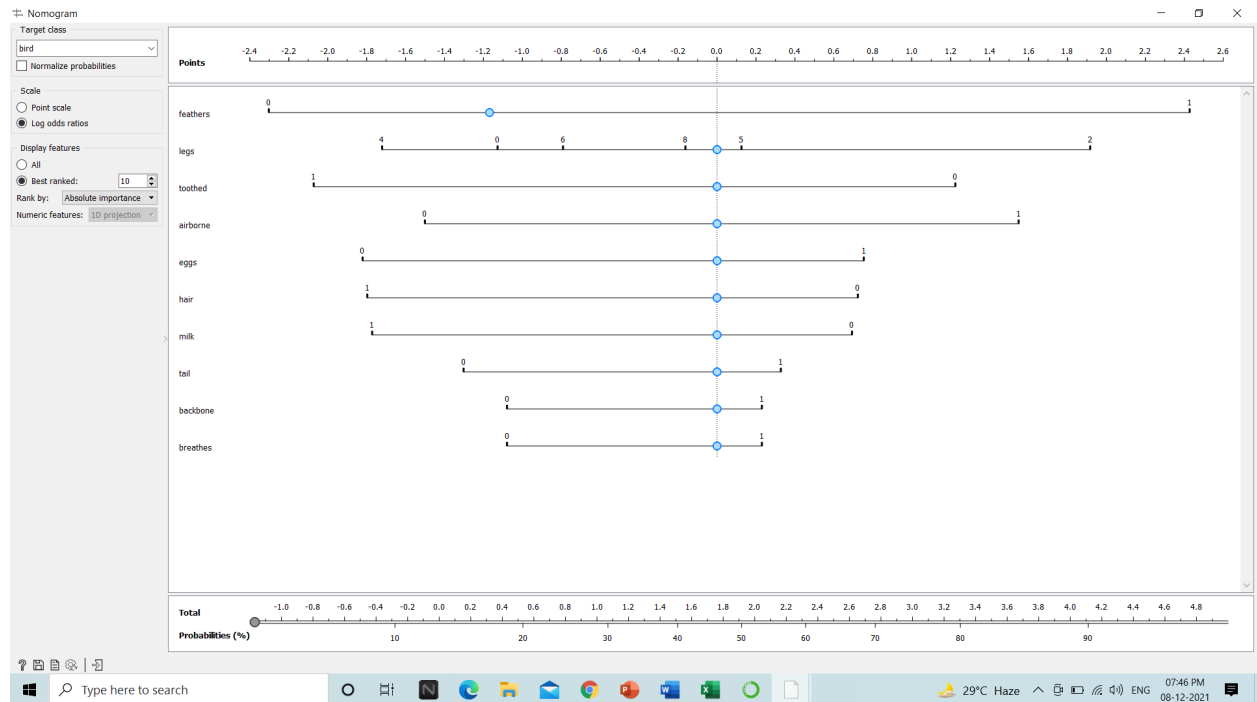
Step4:-Whenever we do prediction we will need to connect them with native bayes and classification tree to the prediction by dragging them across.



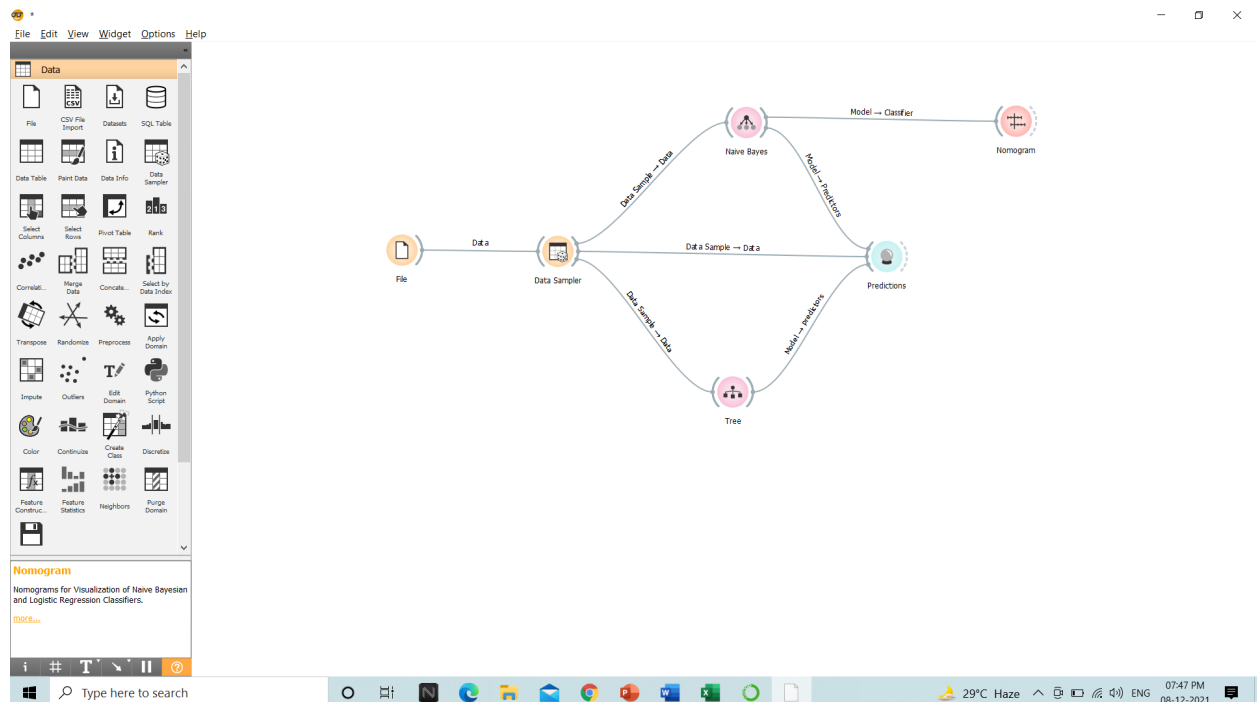


Step5:-The model is also able to show how you can predict the type class of the various attributes so you can use the nomogram for that double click on nomogram and you see the type of target class list so let's see if the you want to see if the data input you can drag these points across by sliding across the data one means yes and zero means no





## Step6:-Connect the Native Bayes and Classification Tree to Prediction



Step7:-Double click on the prediction and you will the data attributes by seeing this input from hair feathers eggs milk and so on

Predictions

Show probabilities for

amphibian  
bird  
fish  
insect

	Naive Bayes	Tree	type	name	hair	feathers	eggs	milk	airborne	aquatic
1	0.00:0.00:0.00:0.00:0.99:0.01 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	squirrel	1	0	0	1	0	0
2	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	oryx	1	0	0	1	0	0
3	0.08:0.00:0.23:0.00:0.00:0.07:0.62 → reptile	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	porpoise	0	0	0	1	0	1
4	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	puma	1	0	0	1	0	0
5	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	lion	1	0	0	1	0	0
6	0.00:0.00:0.00:1.00:0.00:0.00:0.00 → insect	0.00:0.00:0.00:1.00:0.00:0.00:0.00 → insect	insect	honeybee	1	0	1	0	1	0
7	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	elephant	1	0	0	1	0	0
8	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	leopard	1	0	0	1	0	0
9	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	cheetah	1	0	0	1	0	0
10	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	aardvark	1	0	0	1	0	0
11	0.00:0.00:0.98:0.00:0.00:0.00:0.01 → fish	0.00:0.00:1.00:0.00:0.00:0.00:0.00 → fish	fish	dogfish	0	0	1	0	0	1
12	0.00:0.00:0.00:1.00:0.00:0.00:0.00 → insect	0.00:0.00:0.00:1.00:0.00:0.00:0.00 → insect	insect	gnat	0	0	1	0	1	0
13	0.00:0.00:0.00:1.00:0.00:0.00:0.00 → insect	0.00:0.00:0.00:1.00:0.00:0.00:0.00 → insect	insect	wasp	1	0	1	0	1	0
14	0.00:1.00:0.00:0.00:0.00:0.00:0.00 → bird	0.00:1.00:0.00:0.00:0.00:0.00:0.00 → bird	bird	gull	0	1	1	0	1	1
15	0.01:0.00:0.00:0.00:0.97:0.00:0.02 → invertebrate	0.00:0.00:0.00:0.00:1.00:0.00:0.00 → invertebrate	invertebrate	seawasp	0	0	1	0	0	1
16	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	boar	1	0	0	1	0	0
17	0.00:0.00:0.00:0.00:0.00:0.98:0.01 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	vampire	1	0	0	1	1	0
18	0.00:1.00:0.00:0.00:0.00:0.00:0.00 → bird	0.00:1.00:0.00:0.00:0.00:0.00:0.00 → bird	bird	skimmer	0	1	1	0	1	1
19	0.00:0.00:0.98:0.00:0.00:0.00:0.01 → fish	0.00:0.00:1.00:0.00:0.00:0.00:0.00 → fish	fish	chub	0	0	1	0	0	1
20	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	goat	1	0	0	1	0	0
21	0.02:0.00:0.02:0.00:0.00:0.00:0.96 → reptile	0.00:0.00:0.00:0.00:0.00:0.00:1.00 → reptile	reptile	seasnake	0	0	0	0	0	1
22	0.99:0.00:0.00:0.00:0.00:0.00:0.01 → amphibian	1.00:0.00:0.00:0.00:0.00:0.00:0.00 → amphibian	amphibian	toad	0	0	1	0	0	1
23	0.93:0.00:0.00:0.00:0.00:0.00:0.07 → amphibian	1.00:0.00:0.00:0.00:0.00:0.00:0.00 → amphibian	amphibian	frog	0	0	1	0	0	1
24	0.00:0.00:0.00:0.95:0.05:0.00:0.00 → insect	0.00:0.00:0.00:1.00:0.00:0.00:0.00 → insect	insect	ladybird	0	0	1	0	1	0
25	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	reindeer	1	0	0	1	0	0
26	0.01:0.00:0.00:0.01:0.98:0.00:0.00 → invertebrate	0.00:0.00:0.00:0.00:1.00:0.00:0.00 → invertebrate	invertebrate	crayfish	0	0	1	0	0	1
27	0.00:0.00:0.00:1.00:0.00:0.00:0.00 → insect	0.00:0.00:0.00:1.00:0.00:0.00:0.00 → insect	insect	housefly	1	0	1	0	1	0
28	0.02:0.00:0.00:0.01:0.42:0.00:0.55 → reptile	0.00:0.00:0.00:0.00:1.00:0.00:0.00 → invertebrate	invertebrate	scorpion	0	0	0	0	0	0
29	0.02:0.00:0.00:0.00:0.00:0.98:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	cavy	1	0	0	1	0	0
30	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	wallaby	1	0	0	1	0	0
31	0.00:1.00:0.00:0.00:0.00:0.00:0.00 → bird	0.00:1.00:0.00:0.00:0.00:0.00:0.00 → bird	bird	chicken	0	1	1	0	1	0
32	0.25:0.00:0.00:0.00:0.00:0.00:0.75 → reptile	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → reptile	reptile	tuatara	0	0	1	0	0	0
33	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	polecat	1	0	0	1	0	0
34	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	0.00:0.00:0.00:0.00:0.00:1.00:0.00 → mammal	mammal	giraffe	1	0	0	1	0	0
35	0.00:1.00:0.00:0.00:0.00:0.00:0.00 → bird	0.00:1.00:0.00:0.00:0.00:0.00:0.00 → bird	bird	sparrow	0	1	1	0	1	0

Model AUC CA F1 Precision Recall

Naive Bayes 1.000 0.944 0.948 0.967 0.944

Tree 0.999 0.986 0.986 0.988 0.986

Restore Original Order

71

Type here to search

29°C Haze 07:48 PM 08-12-2021

Step8:-There are different ways to visualize the data on the left side of the screen you can scroll down and you will see the visualize step so you click on the tab and you will see several regions that you can use to visualize the data like scatter plot,linear projection etc.

For this example we are going to use linear projection.

