AHSANULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (AUST)
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Department of Computer Science and Engineering
Program: Bachelor of Science in Computer Science and Engineering

Course No: 4142 Course Title: Data Warehousing and Mining Lab

Assignment 1

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Submitted by,

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Section: A

Task-1:

First I created a custom dataset and save it as **20200204051_originalTraining.arff**,

```
@relation Employee_Bonus

@attribute performance {poor, satisfactory, good, excellent}
@attribute experience numeric
@attribute satisfaction {low, medium, high}
@attribute education {high_school, bachelors, masters, phd}
@attribute age numeric
@attribute department {sales, marketing, finance, engineering, HR}
@attribute salary numeric
@attribute bonus {yes, no}

@data
poor,2,low,high_school,25,sales,30000,yes
satisfactory,5,medium,bachelors,30,marketing,40000,no
good,8,high,masters,35,finance,50000,yes
excellent,10,high,phd,40,engineering,60000,yes
satisfactory,4,low,bachelors,28,HR,35000,no
excellent,12,high,masters,45,engineering,70000,yes
poor,1,low,high_school,22,sales,28000,no
good,7,medium,bachelors,32,marketing,45000,yes
satisfactory,6,high,masters,38,finance,55000,no
good,9,medium,bachelors,33,engineering,65000,yes
poor,3,low,high_school,27,HR,32000,no
excellent,11,high,phd,42,engineering,68000,yes
satisfactory,5,medium,masters,31,finance,42000,no
good,8,high,bachelors,34,marketing,47000,yes
poor,2,low,high_school,26,sales,31000,no
excellent,12,high,masters,48,engineering,72000,yes
satisfactory,4,medium,bachelors,29,HR,38000,no
good,8,high,masters,36,finance,51000,yes
satisfactory,6,medium,masters,39,engineering,59000,yes
excellent,10,high,phd,41,marketing,48000,yes
satisfactory,3,low,bachelors,26,HR,33000,no
poor,1,low,high_school,23,sales,29000,no
good,7,medium,masters,37,finance,52000,yes
satisfactory,5,medium,bachelors,30,engineering,56000,yes
excellent,9,high,phd,44,engineering,73000,yes
good,8,high,masters,35,marketing,49000,yes
satisfactory,6,medium,masters,38,HR,37000,no
poor,2,low,high_school,24,sales,30000,no
excellent,11,high,masters,46,engineering,71000,yes
good,7,medium,bachelors,31,finance,53000,yes
satisfactory,4,low,masters,27,HR,34000,no
poor,3,low,high_school,28,sales,32000,no
good,9,high,masters,36,marketing,50000,yes
excellent,12,high,phd,43,engineering,74000,yes
satisfactory,5,medium,bachelors,32,HR,39000,no
good,8,high,masters,37,finance,54000,yes
excellent,10,high,masters,47,engineering,68000,yes
satisfactory,6,medium,bachelors,33,sales,31000,no
```

And a test dataset and saved it as 20200204051_originalTest.arff

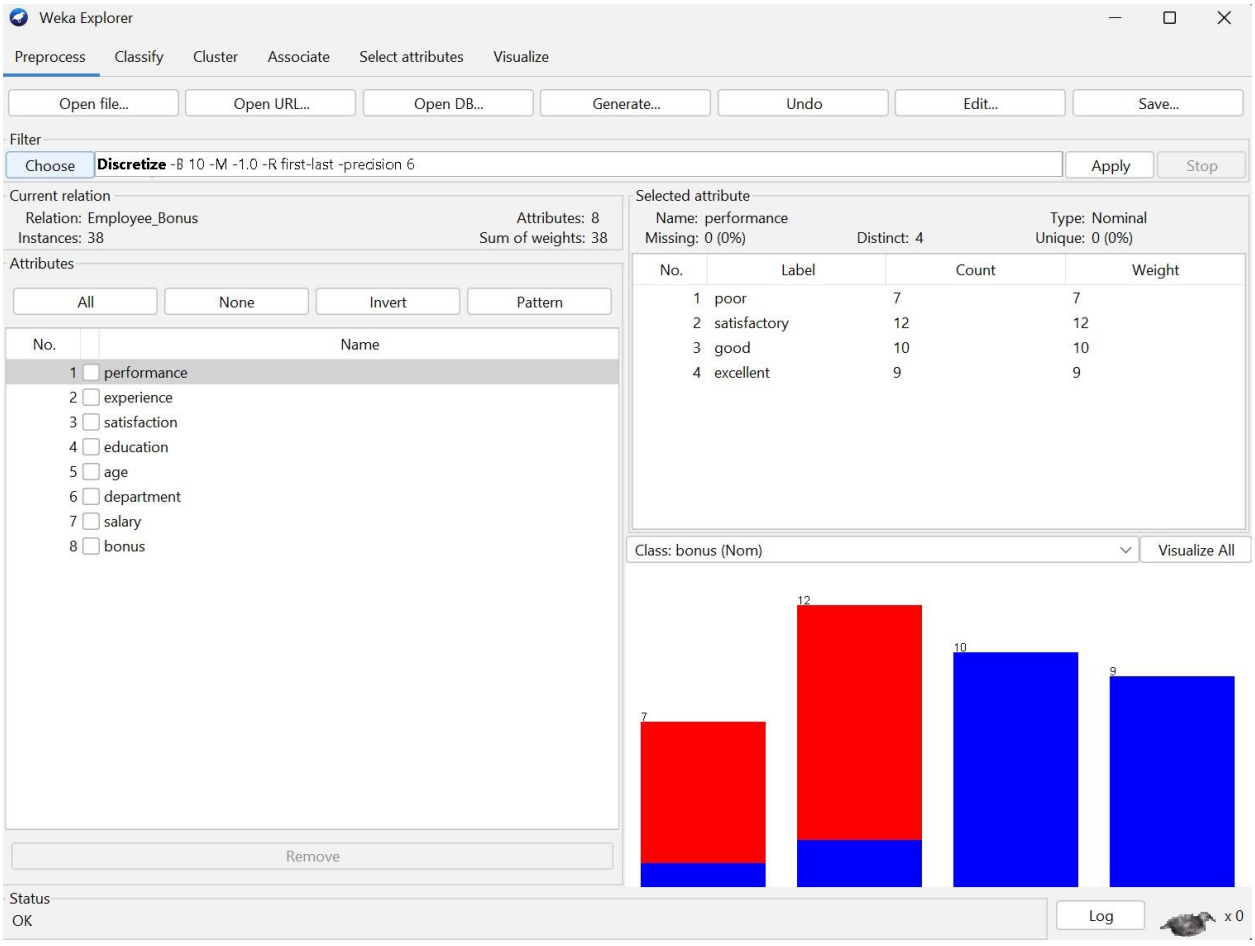
```
@relation Employee_Bonus

@attribute performance {poor, satisfactory, good, excellent}
@attribute experience numeric
@attribute satisfaction {low, medium, high}
@attribute education {high_school, bachelors, masters, phd}
@attribute age numeric
@attribute department {sales, marketing, finance, engineering, HR}
@attribute salary numeric
@attribute bonus {yes, no}

@data
poor,1,low,high_school,23,HR,32000,no
good,6,medium,masters,35,finance,50000,yes
satisfactory,4,medium,bachelors,29,HR,36000,no
excellent,10,high,masters,42,engineering,68000,yes
poor,2,low,high_school,26,sales,29000,no
good,8,medium,bachelors,30,marketing,48000,yes
satisfactory,5,high,masters,37,finance,53000,no
excellent,11,high,phd,44,engineering,70000,yes
```

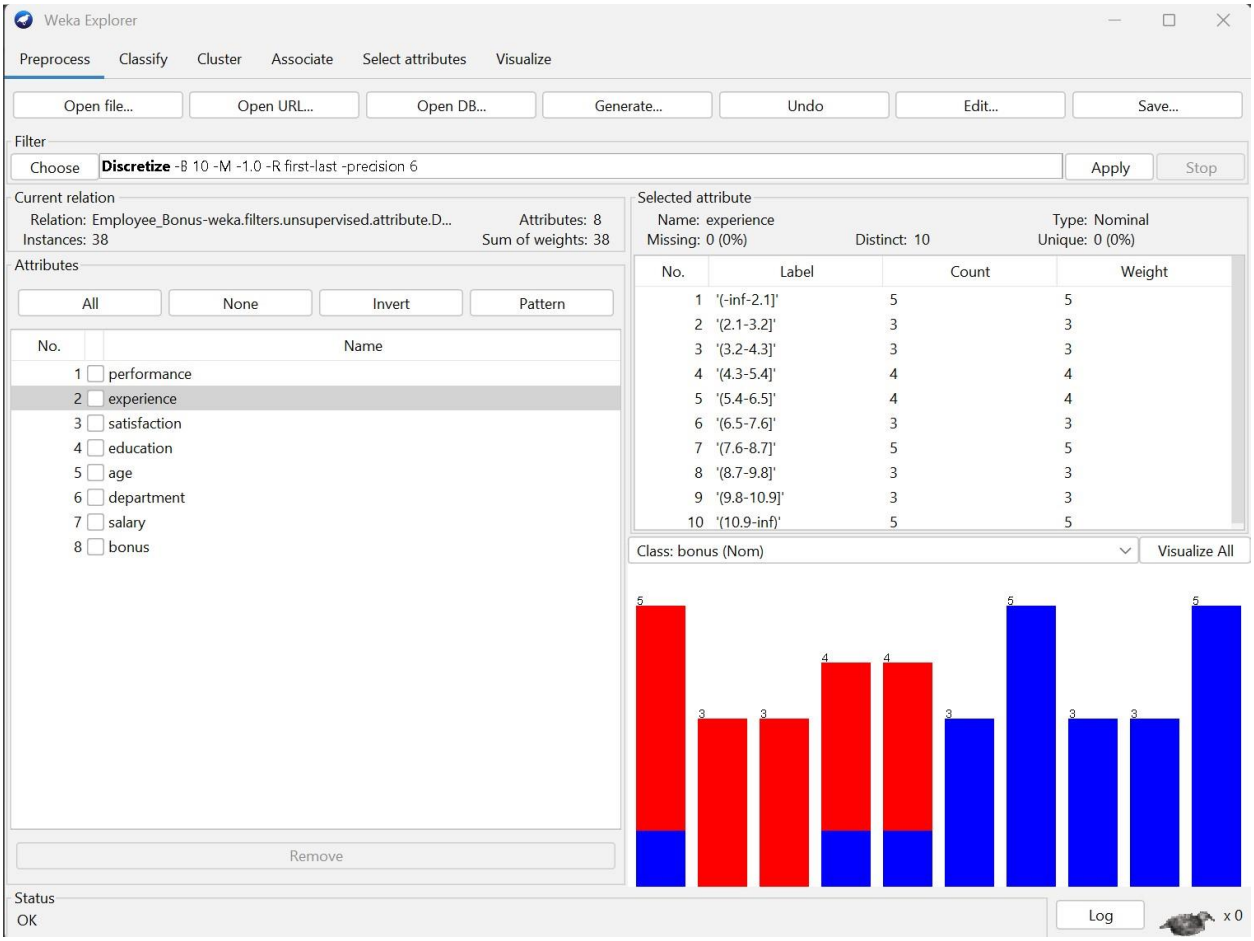
Task-2:

Then I selected the dataset from … preprocess > Open file > Desktop > **20200204051_originalTraining.arff > Open**



Task-3:

Then I normalized the **original and test** dataset , Preprocess>Choose > filters> unsupervised >Discretize >Apply



Then saved as ,

20200204051_modTraining.arff

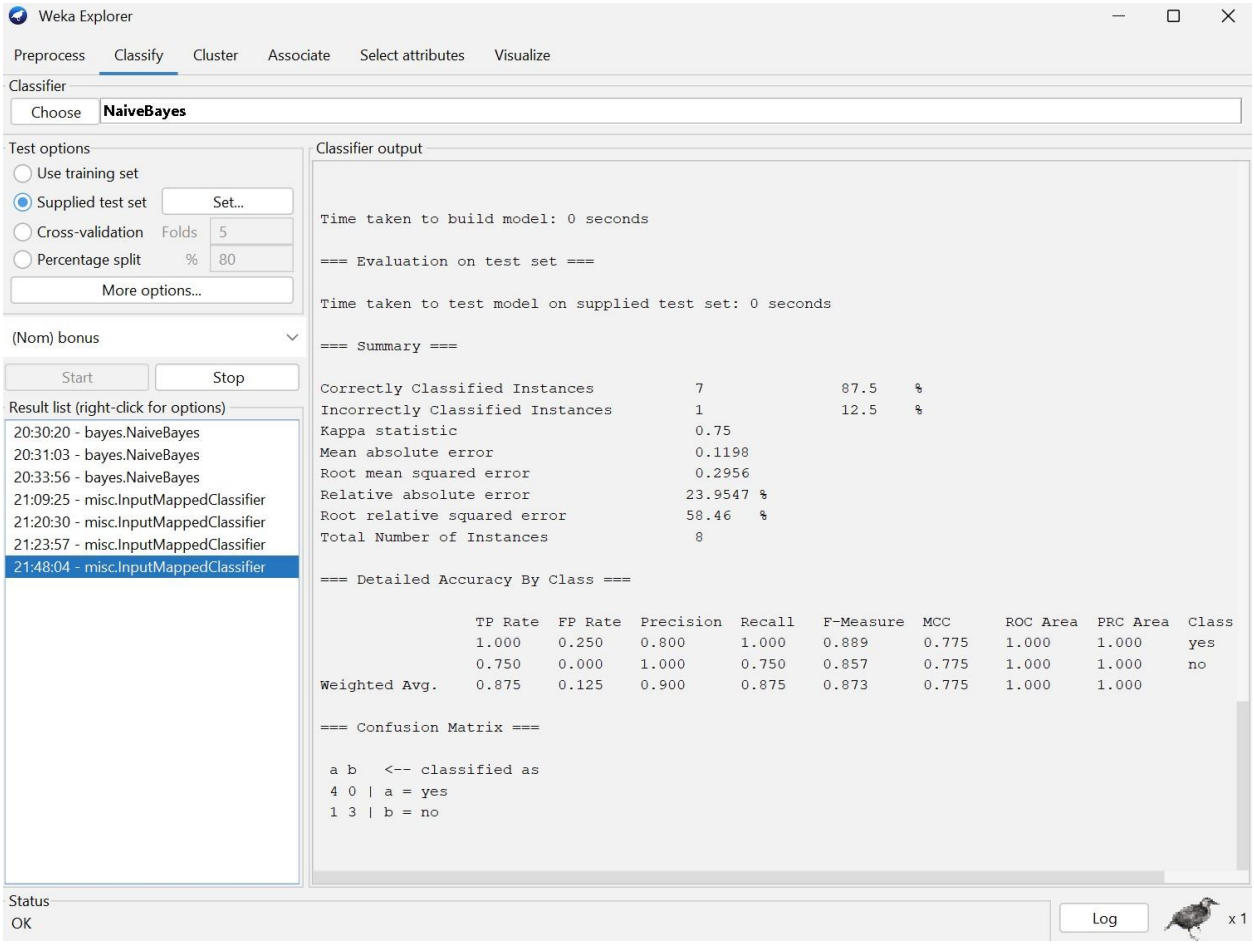
&

20200204051_modTest.arff

Task-4-5:

Then I classified the dataset , (selecting "**20200204051_modTraining.arff")**

Classify > Choose > NaiveBayes > Supplied test data (set) > open file > **20200204051_modTest.arff > Start**



Then I right clicked on my model and saved the model as “**20200204051_model**”