

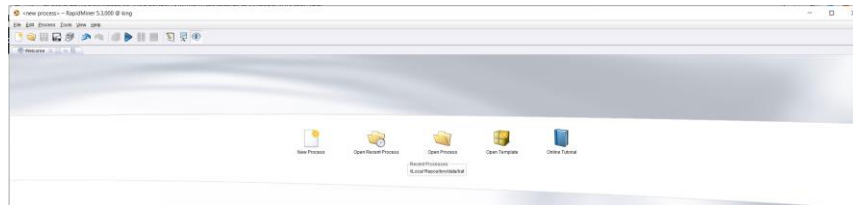
Nama: Gumilar Ichsnaulhaq

NIM: 2106028

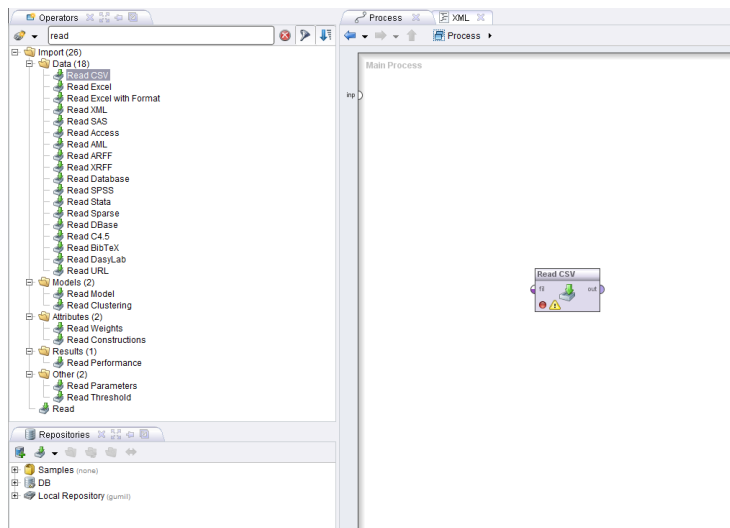
Kelas: A

A.Tahapan RapidMiner Linear Regression

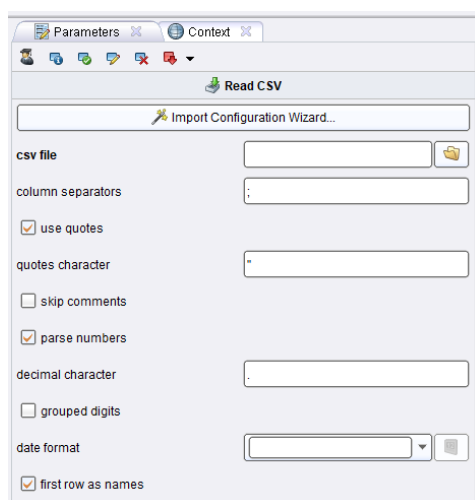
1. Buka RapidMiner Studio dan buatlah sebuah proses baru. Pilih New Process.



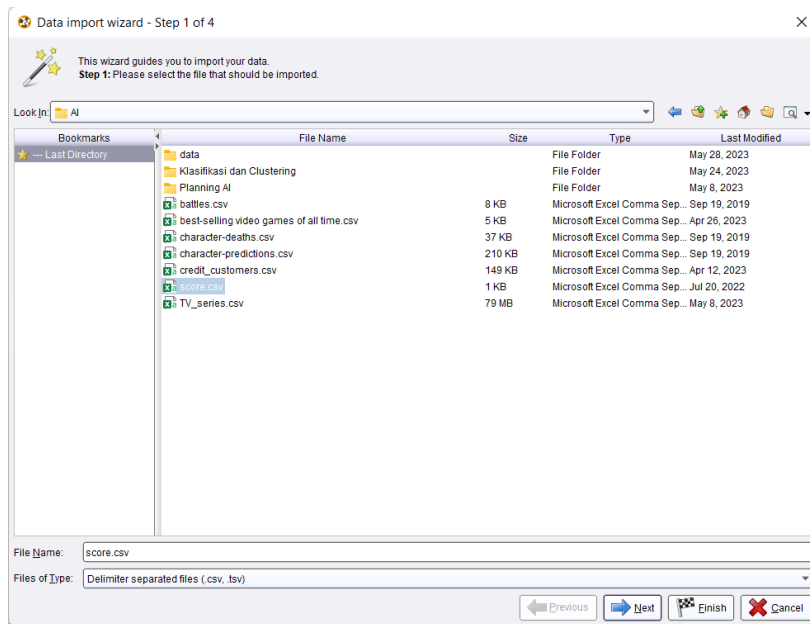
2.Tambahkan Operator “Read CSV” dan masukkan kedalam bagian Process.



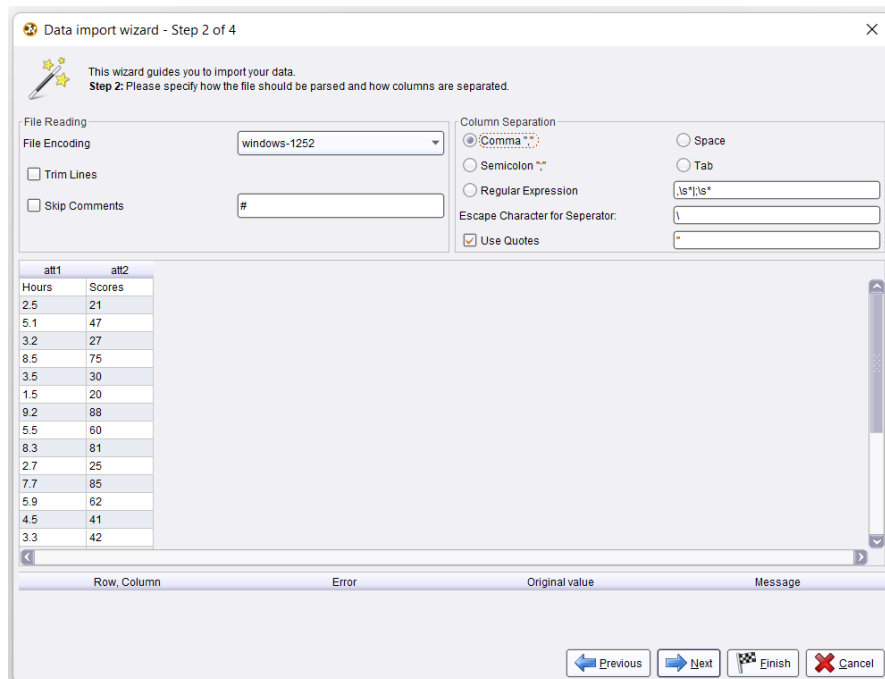
3. Klik Operator “Read CSV”, kemudian klik tombol “Import Configuration Wizard” pada bagian Parameter read csv tersebut.



4. Pilih dataset yang hendak digunakan kemudian klik next.



5. Tentukan comma sebagai column separator nya, kemudian klik next



6.klik next

Data import wizard - Step 3 of 4

This wizard guides you to import your data.
Step 3: In RapidMiner, each attribute can be annotated. The most important annotation of an attribute is its name - a row with this annotation defines the names of the attributes. If your data does not contain attribute names, do not set this property. If further annotations are contained in the rows of your data file, you can assign them here.

Annotation	att1	att2
Name	Hours	Scores
-	2.5	21
-	5.1	47
-	3.2	27
-	8.5	75
-	3.5	30
-	1.5	20
-	9.2	88
-	5.5	60
-	8.3	81
-	2.7	25
-	7.7	85
-	5.9	62
-	4.5	41
-	3.3	42
-	1.1	17
-	8.9	95
-	2.5	30
-	1.9	24
-	6.1	67
-	7.4	69
-	2.7	30
-	4.8	54
-	3.8	35
-	6.9	78
-	7.8	86

7. Atur Kolom “Score” dan ganti attribute nya menjadi “label”. Setelah itu klik finish

Data import wizard - Step 4 of 4

This wizard guides you to import your data.
Step 4: RapidMiner uses strongly typed attributes. In this step, you can define the data types of your attributes. Furthermore, RapidMiner assigns roles to the attributes, defining what they can be used for by the individual operators. These roles can be also defined here. Finally, you can rename attributes or deselect them entirely.

☒ Preview uses only first 100 rows. Date format:

☒ ☒

Hours	Scores
real	integer
[attribute]	[label]
2.500	21
5.100	47
3.200	27
8.500	75
3.500	30
1.500	20
9.200	88
5.500	60
8.300	81
2.700	25
7.700	85
5.900	62
4.500	41
3.300	42

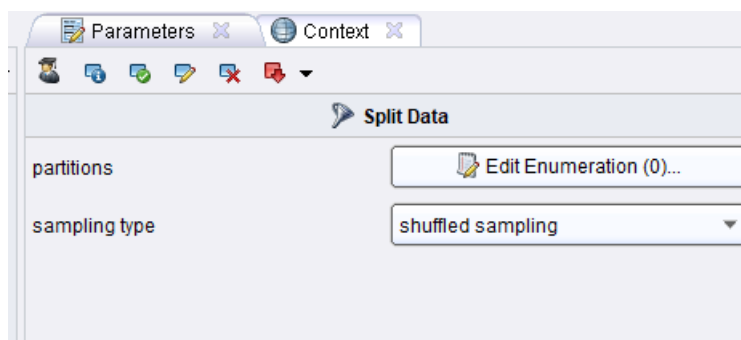
0 errors. ☒ Ignore errors ☐ Show only errors

Row	Column	Error	Original value	Message
-----	--------	-------	----------------	---------

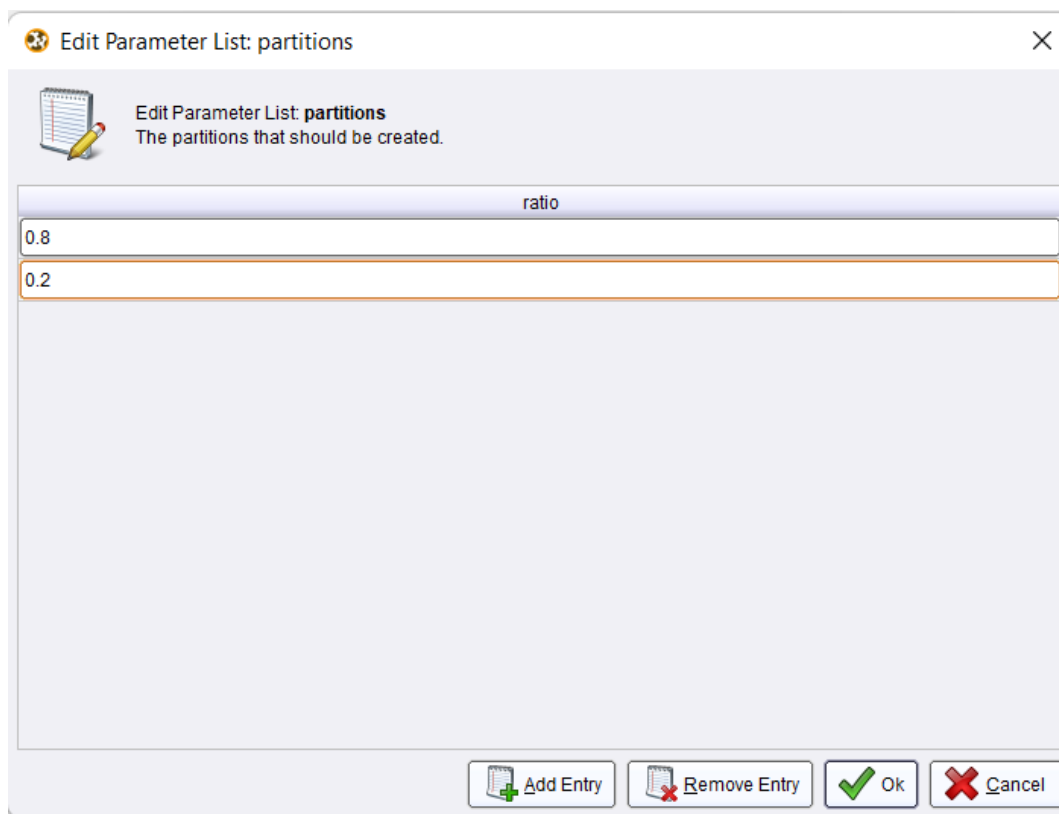
8. . Masukkan Operator “Split Data” dan hubungkan dengan Operator “Read CSV”



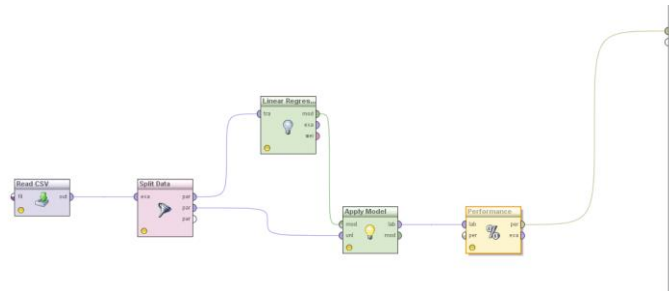
9. Klik Operator “Split Data” kemudian klik “Edit Enumeration” pada bagian Parameter split data tersebut.



10. Split data menjadi 80% untuk training (0.8) dan 20% untuk testing (0.2). Jika sudah klik OK.



11. Masukkan Operator “Linear Regression”, “Apply Model”, dan “Performance(Regression)” kemudian hubungkan seperti gambar dibawah ini:



12. Run atau jalankan untuk melihat hasilnya.

<new process*> – RapidMiner 5.3.000 @ king

File Edit Process Tools View Help

Result Overview PerformanceVector (Performance)

Table / Plot View Text View Annotations

Criterion Selector

root_mean_squared_error

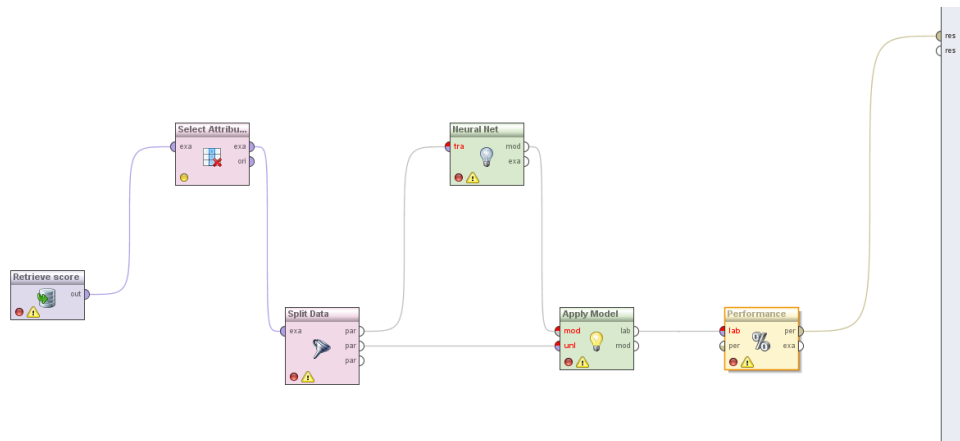
Text View Annotations

root_mean_squared_error

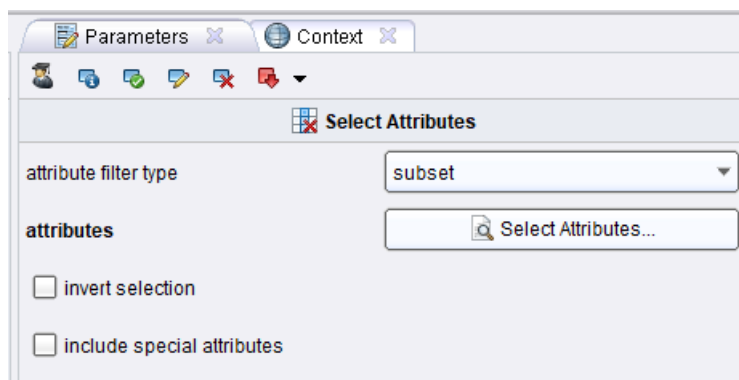
root_mean_squared_error: 6.512 +/- 0.000

B. Tahapan RapidMiner Neural Network

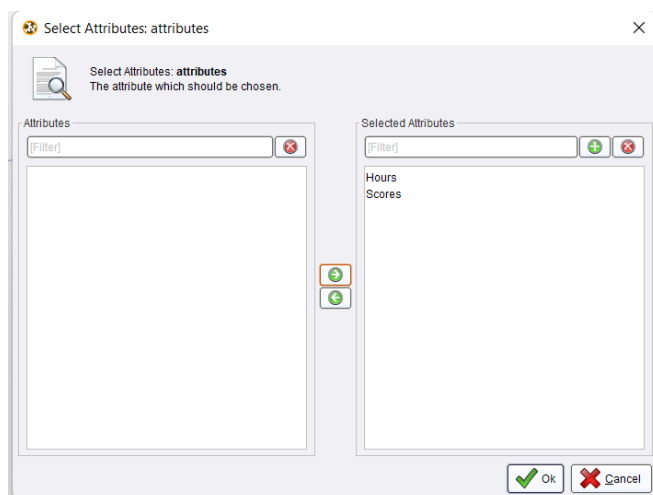
1. Masukkan dataset score dari Repository > Samples > data, lalu masukkan juga Operator “Select Attributes”, “Split Data”, “Neural Net”, “Apply Model”, dan “Performance (Classification)”. Kemudian hubungkan seperti gambar dibawah ini:



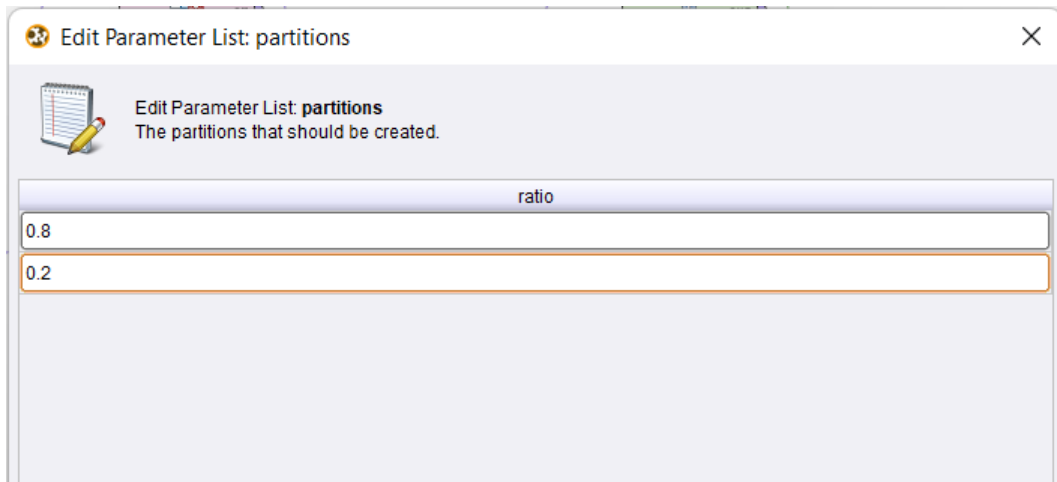
2. Klik Operator “Select Attributes”, kemudian pada Parameter select attributes tersebut terdapat “attribute filter type” ubah lah menjadi “subset” dan lalu juga klik dibawahnya yaitu “Select Attributes”.



3. Tentukan atribut mana saja yang akan digunakan (disini kita akan mengecualikan atribut id). Kemudian klik OK



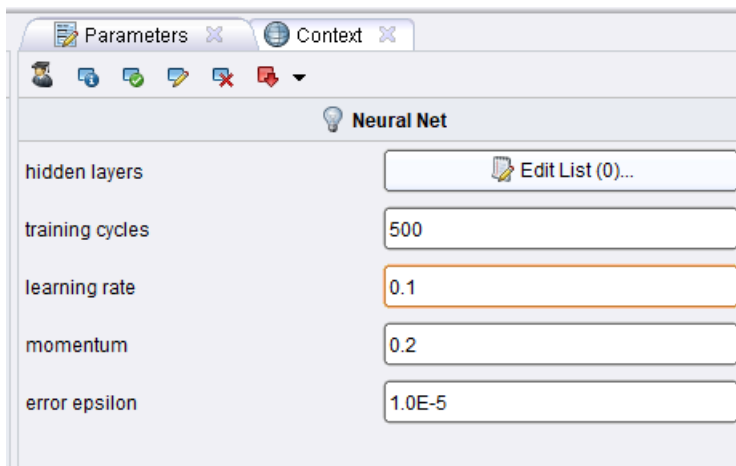
4. Klik Operator “Split Data” kemudian klik “Edit Enumeration” pada bagian Parameter split data tersebut. Lalu ubah Split data menjadi 80% untuk training (0.8) dan 20% untuk testing (0.2). Jika sudah klik OK



The screenshot shows a dialog box titled "Edit Parameter List: partitions". Inside, there is a table with a header "ratio". The table contains two rows with the values "0.8" and "0.2".

ratio
0.8
0.2

5. Klik Operator “Neural Net” kemudian atur “Learning Rate” pada Parameter neural net tersebut menjadi 0.01



The screenshot shows the "Neural Net" configuration window. It has tabs for "Parameters" and "Context". Under the "Parameters" tab, there are several fields: "hidden layers" with an "Edit List (0)..." button, "training cycles" with the value "500", "learning rate" with the value "0.1" (highlighted with an orange border), "momentum" with the value "0.2", and "error epsilon" with the value "1.0E-5".

hidden layers	Edit List (0)...
training cycles	500
learning rate	0.1
momentum	0.2
error epsilon	1.0E-5