Nama : Nuraisah

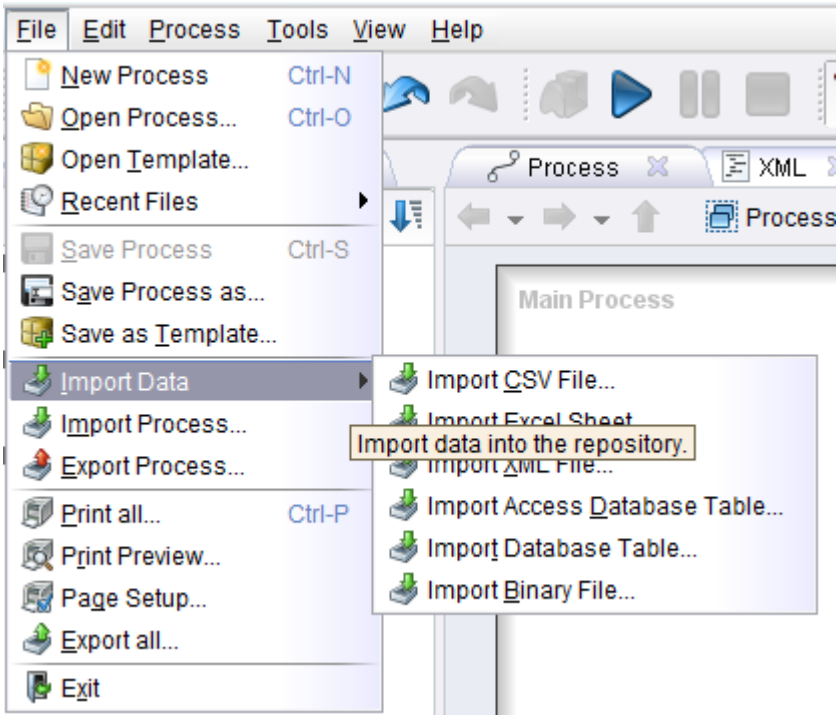
Npm : 2106080

Kelas : Teknik Informatika A

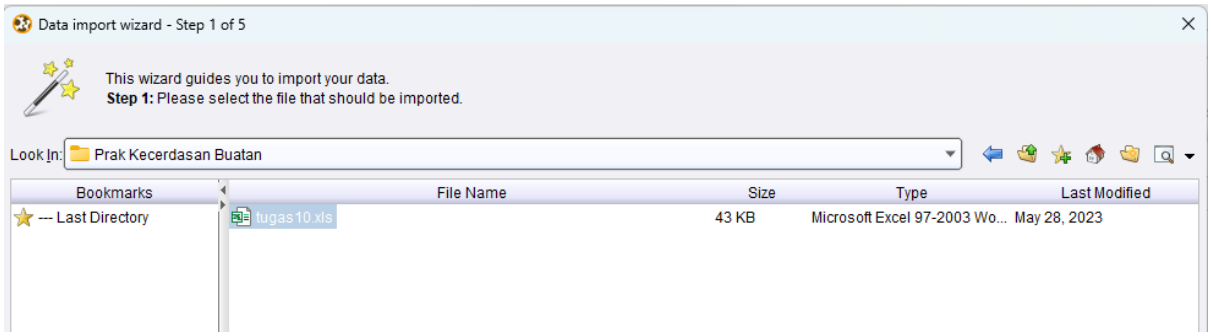
Tugas 10

Import Dataset

Klik Menu File, pilih Import Data lalu pilih Import Excel Sheet.



Cari dataset yang akan diimpor. Lalu klik Next.



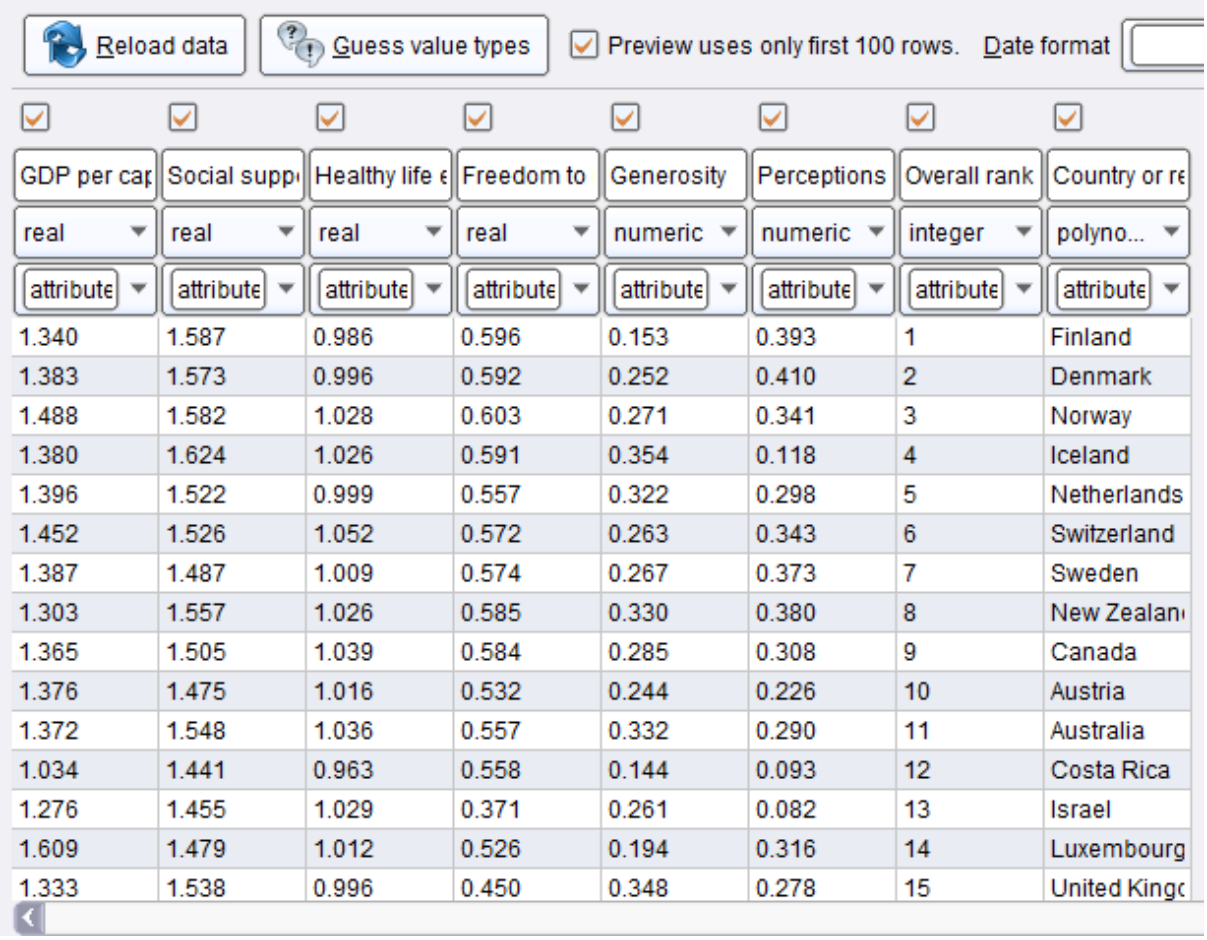
Setelah terimpor, tampilan akan seperti di bawah ini. Klik Next dan Next lagi

Report 2019

A	B	C	D	E	F	G	H
GDP per cap	Social suppo	Healthy life e	Freedom to	Generosity	Perceptions	Overall rank	Country or re
1.34	1.587	0.986	0.596	0.153	0.393	1	Finland
1.383	1.573	0.996	0.592	0.252	0.41	2	Denmark
1.488	1.582	1.028	0.603	0.271	0.341	3	Norway
1.38	1.624	1.026	0.591	0.354	0.118	4	Iceland
1.396	1.522	0.999	0.557	0.322	0.298	5	Netherlands
1.452	1.526	1.052	0.572	0.263	0.343	6	Switzerland
1.387	1.487	1.009	0.574	0.267	0.373	7	Sweden
1.303	1.557	1.026	0.585	0.33	0.38	8	New Zealan
1.365	1.505	1.039	0.584	0.285	0.308	9	Canada
1.376	1.475	1.016	0.532	0.244	0.226	10	Austria
1.372	1.548	1.036	0.557	0.332	0.29	11	Australia
1.034	1.441	0.963	0.558	0.144	0.093	12	Costa Rica
1.276	1.455	1.029	0.371	0.261	0.082	13	Israel
1.609	1.479	1.012	0.526	0.194	0.316	14	Luxembourg
1.333	1.538	0.996	0.45	0.348	0.278	15	United Kingo
1.499	1.553	0.999	0.516	0.298	0.31	16	Ireland
1.373	1.454	0.987	0.495	0.261	0.265	17	Germany
1.356	1.504	0.986	0.473	0.16	0.21	18	Belgium
1.433	1.457	0.874	0.454	0.28	0.128	19	United State
1.269	1.487	0.92	0.457	0.046	0.036	20	Czech Repu
1.503	1.31	0.825	0.598	0.262	0.182	21	United Arab
1.3	1.52	0.999	0.564	0.375	0.151	22	Malta
1.07	1.323	0.861	0.433	0.074	0.073	23	Mexico
1.324	1.472	1.045	0.436	0.111	0.183	24	France
1.368	1.43	0.914	0.351	0.242	0.097	25	Taiwan
1.159	1.369	0.92	0.357	0.187	0.056	26	Chile
0.8	1.269	0.746	0.535	0.175	0.078	27	Guatemala

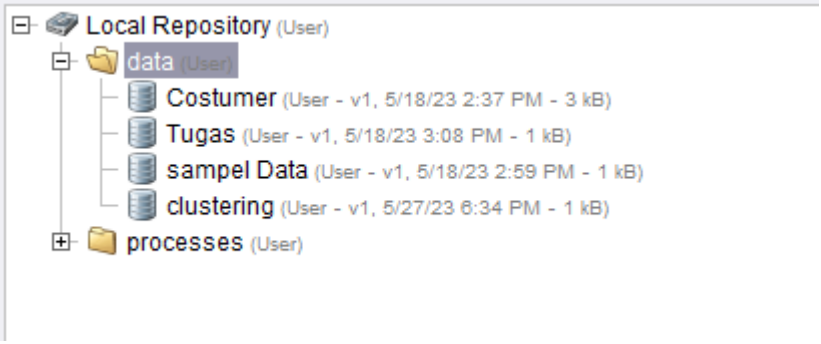
Annotation	A	B	C	D	E	F	G	H
Name	GDP per cap	Social suppo	Healthy life e	Freedom to m	Generosity	Perceptions	Overall rank	Country or re
-	1.34	1.587	0.986	0.596	0.153	0.393	1	Finland
-	1.383	1.573	0.996	0.592	0.252	0.41	2	Denmark
-	1.488	1.582	1.028	0.603	0.271	0.341	3	Norway
-	1.38	1.624	1.026	0.591	0.354	0.118	4	Iceland
-	1.396	1.522	0.999	0.557	0.322	0.298	5	Netherlands
-	1.452	1.526	1.052	0.572	0.263	0.343	6	Switzerland
-	1.387	1.487	1.009	0.574	0.267	0.373	7	Sweden
-	1.303	1.557	1.026	0.585	0.33	0.38	8	New Zealan
-	1.365	1.505	1.039	0.584	0.285	0.308	9	Canada
-	1.376	1.475	1.016	0.532	0.244	0.226	10	Austria
-	1.372	1.548	1.036	0.557	0.332	0.29	11	Australia
-	1.034	1.441	0.963	0.558	0.144	0.093	12	Costa Rica
-	1.276	1.455	1.029	0.371	0.261	0.082	13	Israel
-	1.609	1.479	1.012	0.526	0.194	0.316	14	Luxembourg
-	1.333	1.538	0.996	0.45	0.348	0.278	15	United Kingd
-	1.499	1.553	0.999	0.516	0.298	0.31	16	Ireland
-	1.373	1.454	0.987	0.495	0.261	0.265	17	Germany
-	1.356	1.504	0.986	0.473	0.16	0.21	18	Belgium
-	1.433	1.457	0.874	0.454	0.28	0.128	19	United State
-	1.269	1.487	0.92	0.457	0.046	0.036	20	Czech Repu
-	1.503	1.31	0.825	0.598	0.262	0.182	21	United Arab
-	1.3	1.52	0.999	0.564	0.375	0.151	22	Malta
-	1.07	1.323	0.861	0.433	0.074	0.073	23	Mexico
-	1.324	1.472	1.045	0.436	0.111	0.183	24	France
-	1.368	1.43	0.914	0.351	0.242	0.097	25	Taiwan
-	1.159	1.369	0.92	0.357	0.187	0.056	26	Chile
-	0.8	1.269	0.746	0.535	0.175	0.078	27	Guatemala

Selanjutnya sesuaikan type data dari atribut dataset, apakah polynomial, binominal, integer dan sebagainya. Klik Next



GDP per cap	Social suppo	Healthy life e	Freedom to	Generosity	Perceptions	Overall rank	Country or re
real	real	real	real	numeric	numeric	integer	polyno...
attribute	attribute	attribute	attribute	attribute	attribute	attribute	attribute
1.340	1.587	0.986	0.596	0.153	0.393	1	Finland
1.383	1.573	0.996	0.592	0.252	0.410	2	Denmark
1.488	1.582	1.028	0.603	0.271	0.341	3	Norway
1.380	1.624	1.026	0.591	0.354	0.118	4	Iceland
1.396	1.522	0.999	0.557	0.322	0.298	5	Netherlands
1.452	1.526	1.052	0.572	0.263	0.343	6	Switzerland
1.387	1.487	1.009	0.574	0.267	0.373	7	Sweden
1.303	1.557	1.026	0.585	0.330	0.380	8	New Zealan
1.365	1.505	1.039	0.584	0.285	0.308	9	Canada
1.376	1.475	1.016	0.532	0.244	0.226	10	Austria
1.372	1.548	1.036	0.557	0.332	0.290	11	Australia
1.034	1.441	0.963	0.558	0.144	0.093	12	Costa Rica
1.276	1.455	1.029	0.371	0.261	0.082	13	Israel
1.609	1.479	1.012	0.526	0.194	0.316	14	Luxembourg
1.333	1.538	0.996	0.450	0.348	0.278	15	United Kingc

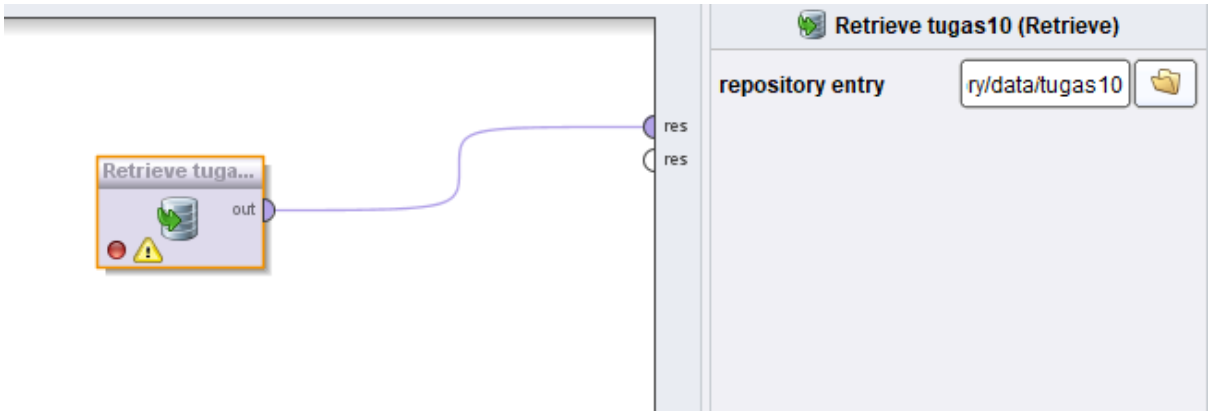
Simpan dataset di local repository dan berikan nama. Lalu klik Finish



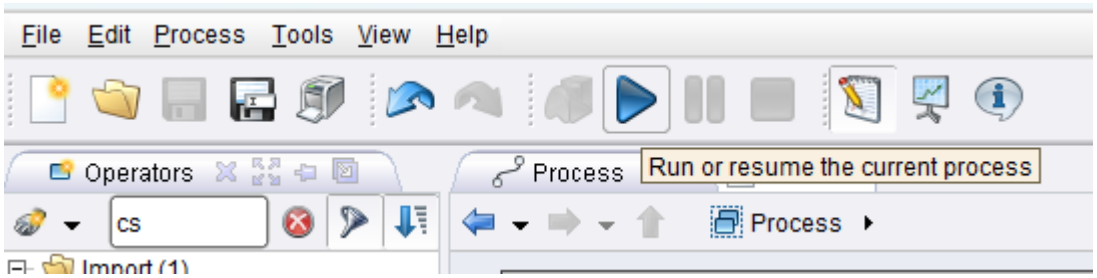
Prepocessing Data

Mengecek Missing Value dan Noise

Drag and drop dataset yang sudah di simpan di local repository ke workspace. Setelah dataset dipindahkan ke workspace, kita lihat apakah dataset ini memiliki missing value dan noise atau tidak dengan menarik garis dari out yang ada di operator dataset ke res yang ada di atas kanan seperti berikut



Jika sudah, lalu klik tombol Run atau dengan menekan F11.



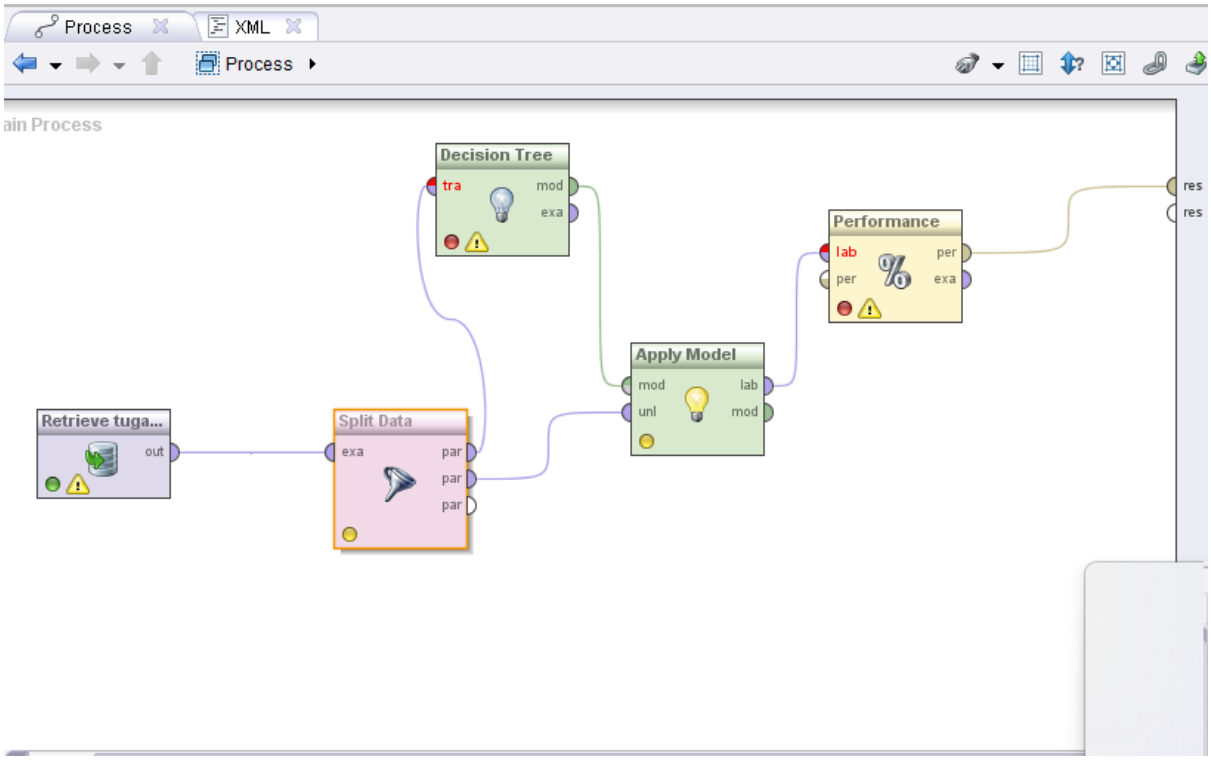
Setelah di Run, maka dataset akan langsung menampilkan seperti gambar di bawah ini

Data View | Meta Data View | Plot View | Advanced Charts | Annotations

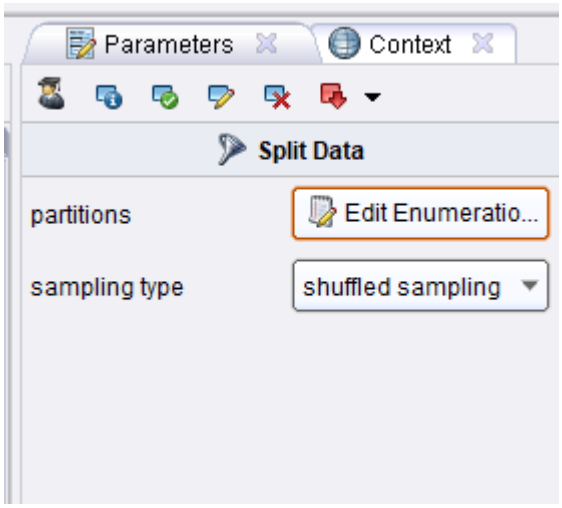
ExampleSet (156 examples, 0 special attributes, 8 regular attributes) View Filter (156 / 156): all

Row No.	GDP per ca...	Social supp...	Healthy life ...	Freedom to ...	Generosity	Perceptions...	Overall rank	Country or r...
1	1.340	1.587	0.986	0.596	0.153	0.393	1	Finland
2	1.383	1.573	0.996	0.592	0.252	0.410	2	Denmark
3	1.488	1.582	1.028	0.603	0.271	0.341	3	Norway
4	1.380	1.624	1.026	0.591	0.354	0.118	4	Iceland
5	1.396	1.522	0.999	0.557	0.322	0.298	5	Netherlands
6	1.452	1.526	1.052	0.572	0.263	0.343	6	Switzerland
7	1.387	1.487	1.009	0.574	0.267	0.373	7	Sweden
8	1.303	1.557	1.026	0.585	0.330	0.380	8	New Zealan
9	1.365	1.505	1.039	0.584	0.285	0.308	9	Canada
10	1.376	1.475	1.016	0.532	0.244	0.226	10	Austria
11	1.372	1.548	1.036	0.557	0.332	0.290	11	Australia
12	1.034	1.441	0.963	0.558	0.144	0.093	12	Costa Rica
13	1.276	1.455	1.029	0.371	0.261	0.082	13	Israel
14	1.609	1.479	1.012	0.526	0.194	0.316	14	Luxembourg
15	1.333	1.538	0.996	0.450	0.348	0.278	15	United Kingc
16	1.499	1.553	0.999	0.516	0.298	0.310	16	Ireland
17	1.373	1.454	0.987	0.495	0.261	0.265	17	Germany
18	1.356	1.504	0.986	0.473	0.160	0.210	18	Belgium
19	1.433	1.457	0.874	0.454	0.280	0.128	19	United State
20	1.269	1.487	0.920	0.457	0.046	0.036	20	Czech Repu

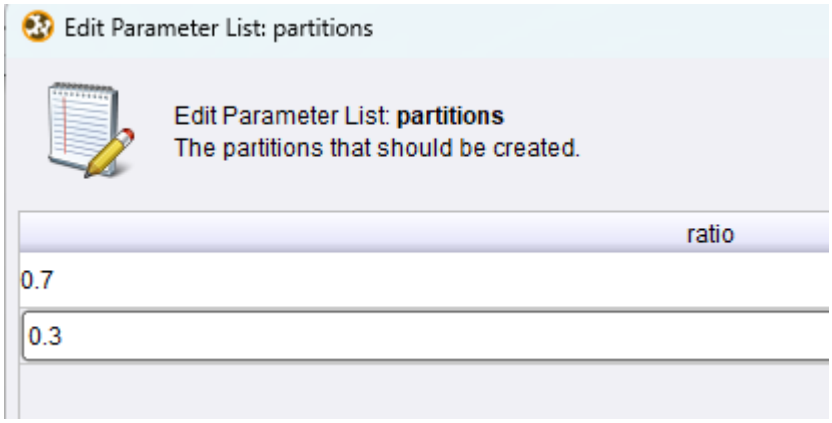
Decision Tree (Classifiaction) 1. Drag and drop operator Decision Tree, Apply Model, Split Data dan Performance dari panel operator di sebelah kiri ke proses di workspace , lalu hubungkan antar operatornya sehingga terlihat seperti berikut



Lalu, klik operator Split Data sehingga di menu parameters terlihat seperti berikut



Setelah itu klik Edit Enumeration untuk menentukan dataset ini akan dibagi menjadi berapa persen untuk data training dan data testingnya. Untuk kali ini, dataset akan dibagi 70% untuk data training dan 30% untuk data testing, maka buat entry seperti berikut.



Setelah itu jalankan dan hasilnya akan tampil seperti berikut