Tp3 - AIGLE

 	@27 septembre 2022
Relue	Non commencé
Type	TP
ः État	Non commencé
→ Matières EC	

2)

a)

Multilayer Perceptrion

cross validation: 10

```
Time taken to build model: 43.59 seconds
=== Cross-validation ===
=== Summary ===
Correlation coefficient
                                          0.5217
Mean absolute error
                                         59.4473
Root mean squared error
                                         80.37
Relative absolute error
                                         86.3737 %
                                         87.2767 %
Root relative squared error
Total Number of Instances
                                     42220
Ignored Class Unknown Instances
                                               1580
```

percentage split 66% et preserve order for%split

Correlation coefficient	0.5087	
Mean absolute error	87.7006	
Root mean squared error	112.7966	
Relative absolute error	132.1985 %	
Root relative squared error	129.1918 %	
Total Number of Instances	14859	
Ignored Class Unknown Instances	33	

RandomTree

cross validation: 10

Correlation coefficient	0.8236
Mean absolute error	29.2853
Root mean squared error	54.6016
Relative absolute error	42.5499 %
Root relative squared error	59.2938 %
Total Number of Instances	42220
Ignored Class Unknown Instances	1580

percentage split 66% et preserve order for%split

=== Summary ===		
Correlation coefficient Mean absolute error	0.2652 70.0144	
Root mean squared error	98.6312	
Relative absolute error Root relative squared error	105.5386 112.9675	
Total Number of Instances	14859	0
Ignored Class Unknown Instances		33

b)

jeux de donnée + pm2.5 | pm2.5_3 | pm2.5_4 | pm2.5_5

percentage split 66% et preserve order for%split

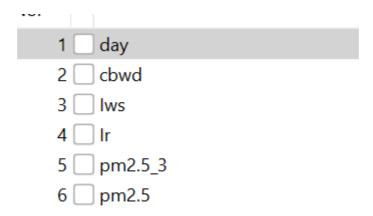
=== Summary ===		
Correlation coefficient	0.8891	
Mean absolute error	25.4132	
Root mean squared error	39.9627	
Relative absolute error	38.3062	8
Root relative squared error	45.7689	8
Total Number of Instances	14857	
Ignored Class Unknown Instances		33

Random Tree

=== Summary ===	
Correlation coefficient	0.7335
Mean absolute error	39.3566
Root mean squared error	62.8407
Relative absolute error	59.3235 %
Root relative squared error	71.971 %
Total Number of Instances	14857
Ignored Class Unknown Instances	33

c)

attribut selection



Random Tree

=== Summary ===		
Correlation coefficient	0.7584	
Mean absolute error	37.5635	
Root mean squared error	60.1211	
Relative absolute error	56.6206	8
Root relative squared error	68.8563	8
Total Number of Instances	14857	
Ignored Class Unknown Instances		33

Multilayer perceptron

=== Summary ===	
Correlation coefficient	0.7584
Mean absolute error	37.5635
Root mean squared error	60.1211
Relative absolute error	56.6206 %
Root relative squared error	68.8563 %
Total Number of Instances	14857
Ignored Class Unknown Instances	33

d)

1 pm2.5 2 pm2.5_3 3 pm2.5_4 4 pm2.5_5

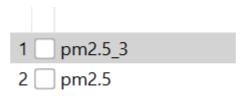
Multilayer perceptron

=== Summary ===		
Correlation coefficient	0.8812	
Mean absolute error	25.9237	
Root mean squared error	41.4716	
Relative absolute error	39.0756	8
Root relative squared error	47.4972	8
Total Number of Instances	14857	
Ignored Class Unknown Instances		33

Random Tree

=== Summary ===		
Correlation coefficient	0.7775	
Mean absolute error	36.5356	
Root mean squared error	59.0848	
Relative absolute error	55.0714	8
Root relative squared error	67.6694	8
Total Number of Instances	14857	
Ignored Class Unknown Instances		33

Attribut selection



Multilayer perceptron

=== Summary ===		
Correlation coefficient	0.8792	
Mean absolute error	26.2866	
Root mean squared error	41.8917	
Relative absolute error	39.6227	8
Root relative squared error	47.9782	8
Total Number of Instances	14857	
Ignored Class Unknown Instances		33

RandomTree

=== Summary ===		
Correlation coefficient	0.8734	
Mean absolute error	26.0624	
Root mean squared error	42.4244	
Relative absolute error	39.2848	8
Root relative squared error	48.5884	8
Total Number of Instances	14857	
Ignored Class Unknown Instances		33