AML MinorAssignment2:

Output:

C:\Users\bkokkula\Anaconda3\python.exe C:/Users/bkokkula/PycharmProjects/ML/NB.py

SVC Model Acuuracy score: 0.9275862068965517

Confusion matrix of SVC Model:

	0	1	2	3	4	5	6	...	13	14	15	16	17	18	19
0	794	0	0	0	0	0	0	...	0	0	1	0	0	0	3
1	0	938	10	5	2	9	2	...	1	0	0	0	1	0	0
2	0	6	963	9	1	3	0	...	0	0	1	0	0	0	1
3	1	6	8	946	7	4	5	...	0	0	0	1	0	0	0
4	0	5	5	7	935	0	5	...	0	0	0	0	0	0	0
5	0	10	6	1	0	968	2	...	0	0	0	0	0	0	0
6	0	1	1	6	4	0	951	...	0	1	0	0	0	0	0
7	0	0	0	0	0	0	4	...	1	0	0	1	0	0	0
8	0	0	0	0	0	0	1	...	0	0	0	1	0	0	0
9	0	0	1	0	0	0	0	...	1	0	2	0	0	0	0
10	0	0	0	1	0	1	0	...	0	1	0	0	0	0	0
11	0	2	1	0	0	2	0	...	0	0	0	1	0	0	1
12	0	2	3	4	1	1	4	...	0	0	0	0	0	1	0
13	1	1	0	0	0	1	2	...	978	1	0	2	0	0	0
14	0	3	0	0	0	0	0	...	0	983	0	0	0	0	0
15	1	0	1	0	0	0	0	...	0	0	990	0	1	1	2
16	0	0	1	0	0	0	3	...	1	0	0	902	0	0	0
17	0	1	0	0	1	0	0	...	0	0	3	0	934	0	0
18	2	0	0	0	1	0	1	...	2	1	0	6	3	757	0
19	7	0	0	0	0	0	1	...	3	1	6	2	0	1	606

[20 rows x 20 columns]

Naive Bayes Model Acuuracy score: 0.9108753315649868

Confusion matrix of Naive Bayes Model:

	0	1	2	3	4	5	6	...	13	14	15	16	17	18	19
0	793	0	0	0	0	0	0	...	0	0	1	0	0	1	4
1	2	926	14	6	1	11	2	...	1	3	0	0	1	0	1
2	0	7	948	18	1	7	1	...	0	0	1	0	0	0	0
3	1	5	11	942	10	5	4	...	0	0	0	0	0	0	0
4	0	5	6	7	937	1	1	...	0	0	0	0	0	0	0
5	0	15	2	3	0	965	1	...	0	0	0	0	0	0	0
6	0	3	1	9	7	1	932	...	0	3	0	1	0	0	0
7	0	0	0	1	1	0	4	...	0	0	0	1	0	1	0
8	0	0	0	0	0	0	1	...	0	0	0	0	0	0	0
9	1	0	0	1	0	0	2	...	0	0	0	0	0	0	0
10	0	0	0	0	1	0	1	...	0	0	0	0	0	0	0
11	0	2	1	0	0	1	0	...	0	0	0	1	0	0	1
12	0	1	0	10	4	1	1	...	0	0	0	0	0	1	0
13	0	2	2	0	0	0	1	...	978	1	0	1	1	2	0
14	0	2	0	0	0	0	1	...	3	980	0	0	0	0	0
15	2	1	0	0	0	0	0	...	0	0	991	0	1	1	1
16	0	0	1	0	0	0	1	...	1	1	0	901	0	2	0
17	0	1	0	0	0	0	0	...	0	0	1	0	938	0	0
18	0	0	0	0	1	0	0	...	0	1	0	12	5	752	1
19	23	0	0	0	1	0	0	...	2	2	8	5	0	2	584

[20 rows x 20 columns]

Neural Network Model Acuuracy score: 0.8978779840848806

Confusion matrix of Neural Network Model:

	0	1	2	3	4	5	6	...	13	14	15	16	17	18	19
0	786	0	0	0	0	0	0	...	0	0	0	0	1	0	12
1	0	933	11	5	2	6	1	...	0	0	0	0	0	0	7
2	0	11	953	4	0	7	2	...	0	0	0	0	0	0	2
3	1	5	8	925	9	2	6	...	0	0	0	0	0	0	3
4	0	7	3	5	935	2	6	...	0	0	0	0	0	0	2
5	0	10	9	0	1	962	1	...	0	0	0	0	0	0	3
6	0	0	2	3	7	0	941	...	0	1	0	0	0	0	5
7	0	0	0	2	1	0	6	...	0	0	0	0	0	0	0
8	0	0	0	1	0	0	1	...	0	0	0	1	0	0	1
9	0	0	0	0	0	0	0	...	0	1	0	0	0	0	4
10	0	0	0	0	0	0	0	...	0	0	0	0	0	0	3
11	0	10	1	0	0	1	0	...	0	0	0	1	0	2	1
12	0	4	2	7	1	1	2	...	0	0	0	0	0	0	1
13	0	4	0	0	1	1	2	...	967	1	0	0	2	4	4
14	0	6	0	1	0	0	1	...	0	973	0	0	0	0	2
15	1	0	1	0	0	0	0	...	0	0	979	0	2	1	13
16	0	0	0	0	0	0	2	...	0	1	0	898	0	5	0
17	0	1	0	0	0	0	0	...	0	0	1	0	937	0	0
18	1	0	0	1	0	0	0	...	0	1	0	5	3	756	3
19	4	0	1	1	0	0	0	...	1	1	8	3	1	1	607

[20 rows x 20 columns]

Process finished with exit code 0