Appendix

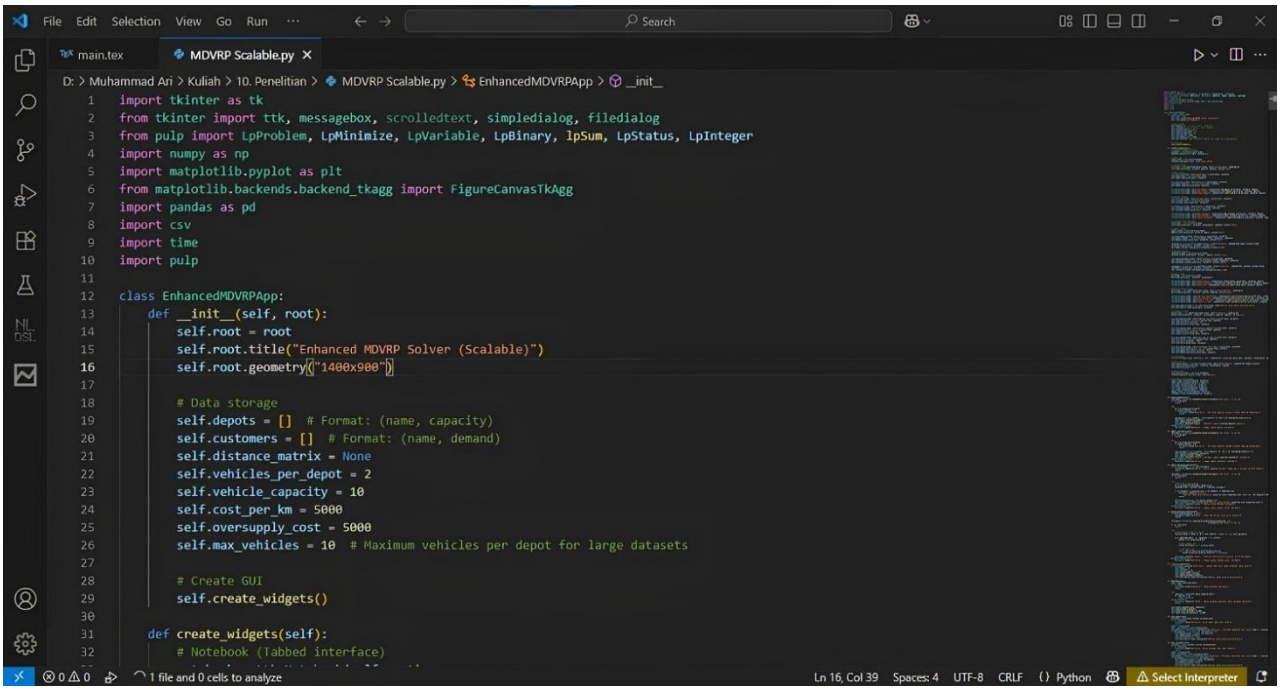
Appendix A: Table of Artificial Data for Numerical Experiment (Depot capacity and customer demand)

No	Depot Name	Capacity (Unit)	Customer	Demand (Unit)
1	D1	116	C1	73
2	D2	127	C2	64
3	D3	105	C3	95
4	D4	122	C4	60
5	D5	109	C5	59
6	D6	105	C6	84
7	D7	106	C7	68
8	D8	118	C8	75
9	D9	120	C9	56
10	D10	123	C10	75
11	D11	102	C11	84
12	D12	112	C12	87
13	D13	105	C13	60
14	D14	121	C14	95
15	D15	104	C15	83
16	D16	124	C16	55
17	D17	115	C17	62
18	D18	123	C18	78
19	D19	124	C19	86
20	D20	126	C20	52
21	D21	102	C21	70
22	D22	126	C22	52
23	D23	122	C23	52
24	D24	117	C24	62
25	D25	129	C25	84
26	D26	115	C26	52
27	D27	100	C27	93
28	D28	124	C28	88
29	D29	109	C29	54
30	D30	121	C30	50
31	D31	123	C31	58
32	D32	122	C32	62
33	D33	128	C33	93
34	D34	114	C34	54
35	D35	120	C35	67
36	D36	119	C36	77
37	D37	109	C37	66
38	D38	127	C38	71
39	D39	127	C39	54
40	D40	124	C40	61
41	D41	106	C41	69
42	D42	127	C42	53
43	D43	122	C43	51
44	D44	130	C44	84
45	D45	112	C45	94
46	D46	118	C46	84
47	D47	108	C47	93
48	D48	102	C48	66
49	D49	102	C49	71
50	D50	126	C50	74

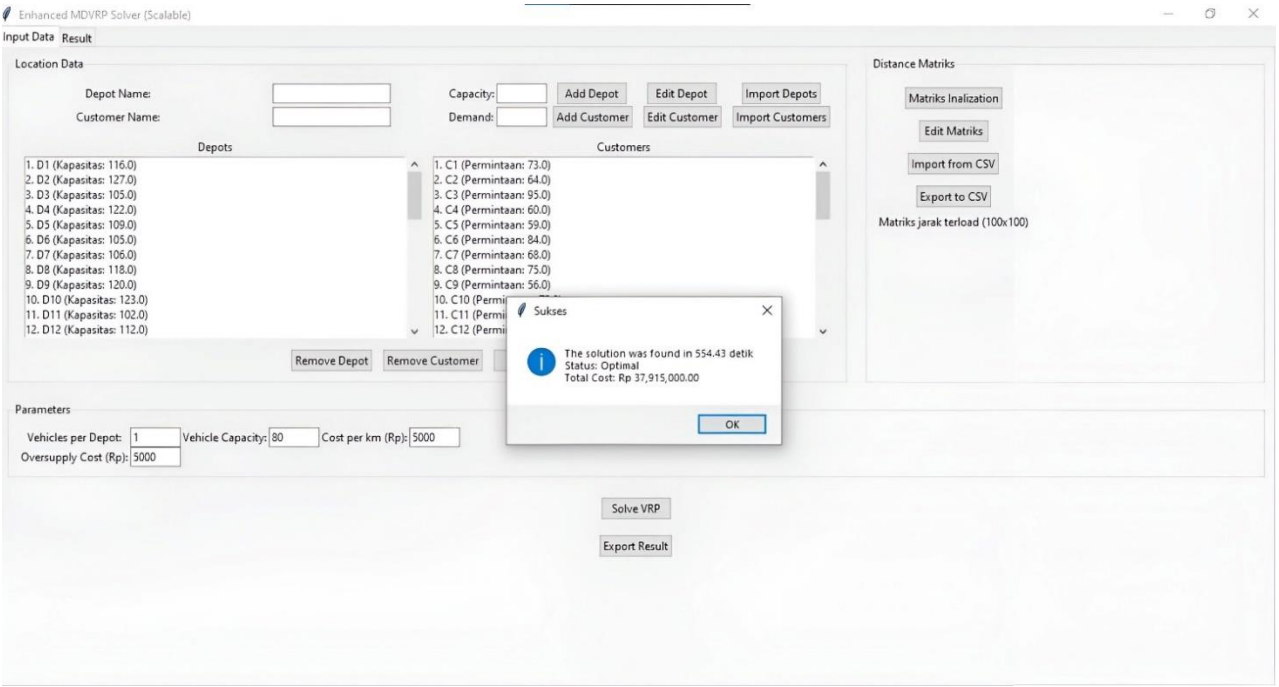
Appendix B: Table of Artificial Data for Numerical Experiment (Travel distance matrix)

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	….	….	….	C50
D1	0	56	44	75	44	44	65	56	63	57	….	….	….	73
D2	75	0	64	62	45	67	52	76	56	81	….	….	….	66
D3	77	58	0	64	81	55	85	49	80	76	….	….	….	36
D4	57	51	93	0	46	46	37	75	48	61	….	….	….	62
D5	41	38	81	40	0	43	66	74	67	63	….	….	….	49
D6	83	39	74	72	58	0	54	74	48	41	….	….	….	73
D7	40	39	76	82	82	43	0	43	70	81	….	….	….	40
D8	85	69	83	48	81	51	63	0	45	36	….	….	….	41
D9	76	50	89	91	68	68	71	70	0	45	….	….	….	35
D10	87	77	49	39	79	55	83	77	51	0	….	….	….	67
….	….	….	….	….	….	….	….	….	….	….	0	….	….	….
….	….	….	….	….	….	….	….	….	….	….	….	0	….	….
….	….	….	….	….	….	….	….	….	….	….	….	….	0	….
C50	53	56	53	35	61	76	41	43	72	38	….	….	….	0

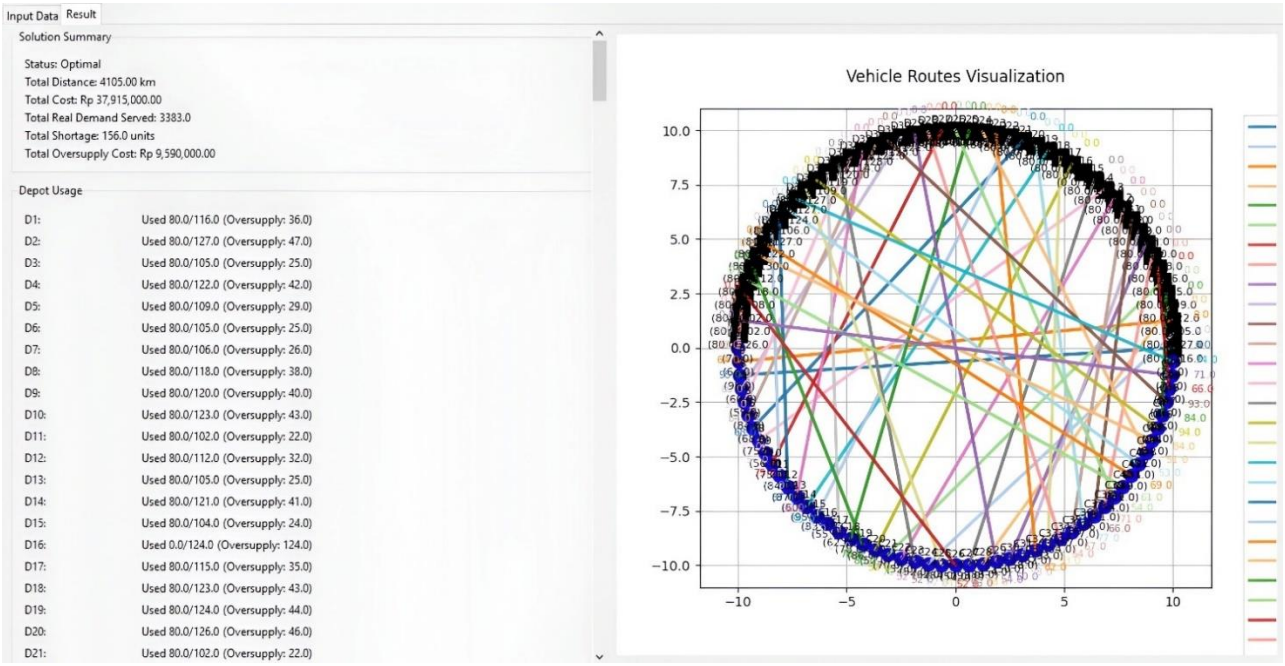
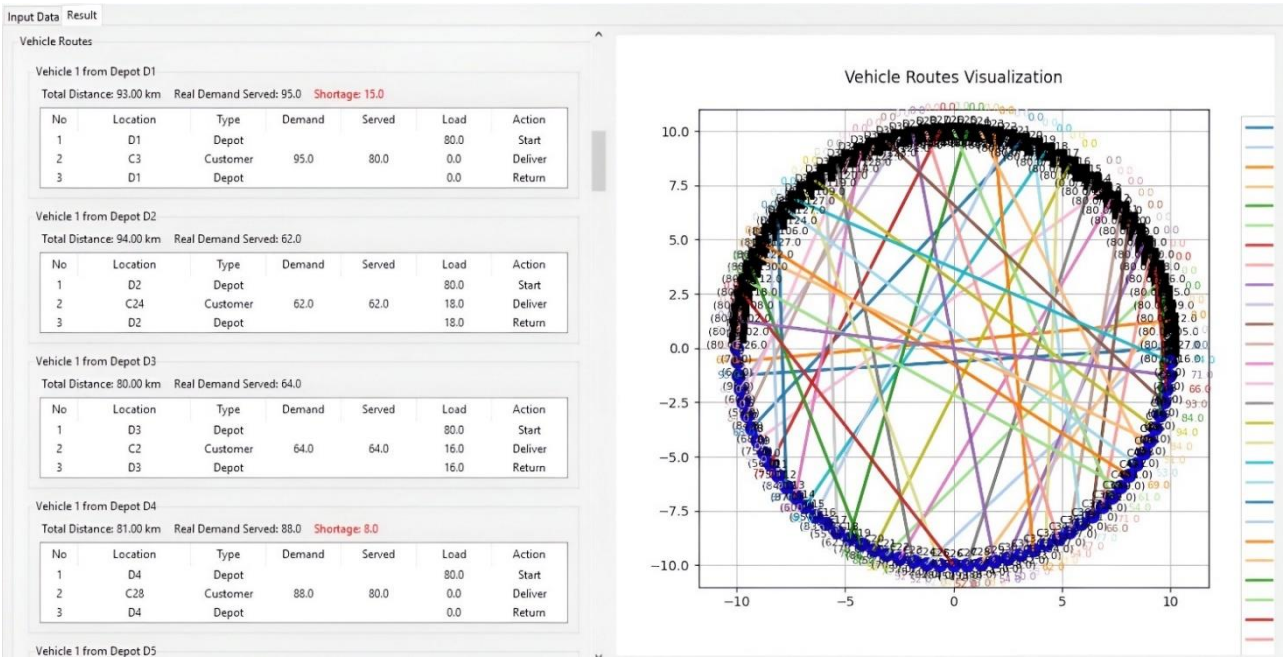
Appendix C: Figure of Coding Program HMDS Application



Appendix D: Figure of Input Program of HMDS Application



Appendix E: Figure of Output Program HMDS Application for depot usage



Appendix F: Figure of Output Program HMDS Application for vehicle routes