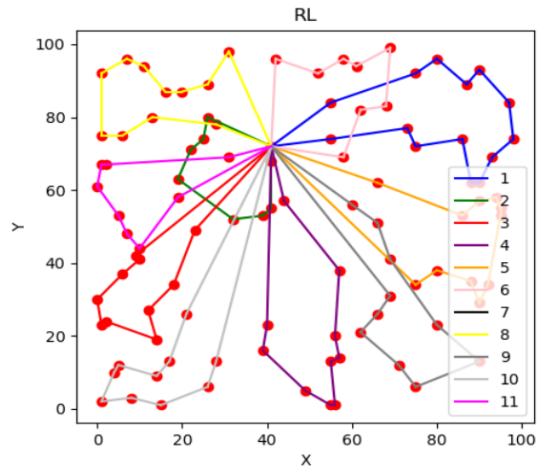


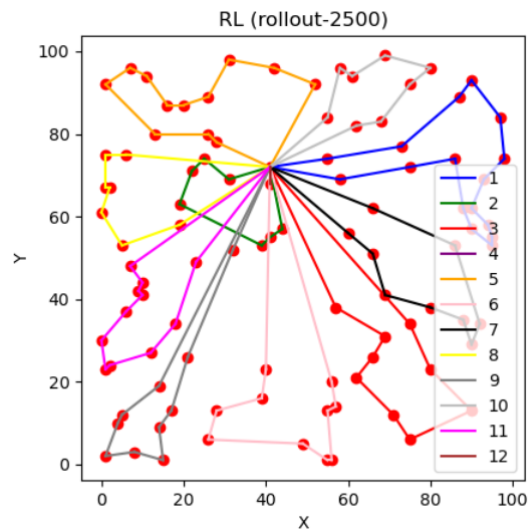
Problem = 100 (Trained)

30 sec

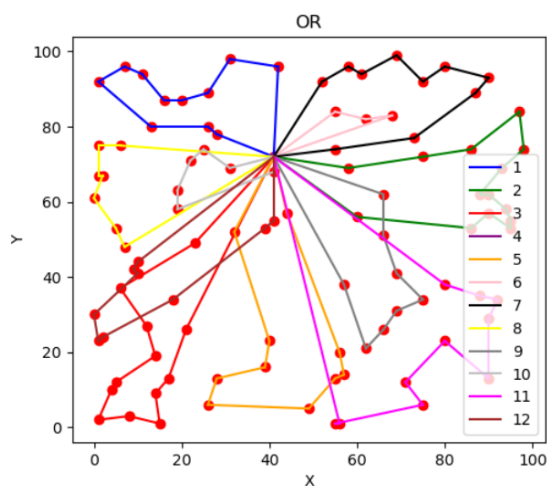
Distance for route 1: 160.54229107686544
Distance for route 2: 79.7982882652731
Distance for route 3: 144.12262578471012
Distance for route 4: 155.8654110006146
Distance for route 5: 160.68220107823308
Distance for route 6: 108.01991795419333
Distance for route 7: 0.0
Distance for route 8: 128.8154180694027
Distance for route 9: 176.70201206606205
Distance for route 10: 183.15768345998967
Distance for route 11: 109.13122528380097
1406.8370740391451



Distance for route 1: 172.44662182464066
Distance for route 2: 75.12891733324045
Distance for route 3: 177.41045528062588
Distance for route 4: 0.0
Distance for route 5: 132.79865409358823
Distance for route 6: 180.47662798640894
Distance for route 7: 143.52791408565093
Distance for route 8: 105.82975096102305
Distance for route 9: 172.84072199028842
Distance for route 10: 102.3967401678992
Distance for route 11: 138.30666871433215
Distance for route 12: 8.0
1409.1630724376978

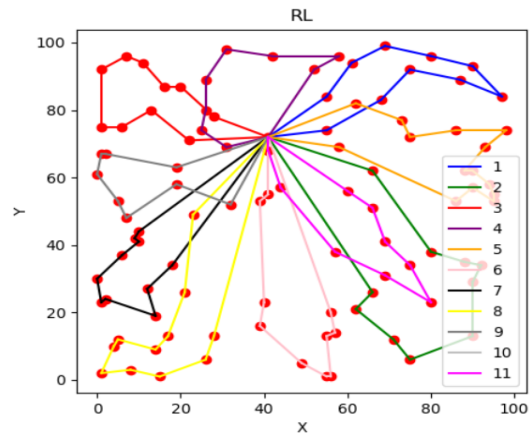


Distance for route 1: 123.2237243572212
Distance for route 2: 162.18613008804982
Distance for route 3: 183.2794075685577
Distance for route 4: 0.0
Distance for route 5: 173.30278065715382
Distance for route 6: 60.95672080839101
Distance for route 7: 124.96854671232289
Distance for route 8: 111.88934149339808
Distance for route 9: 131.8245886694347
Distance for route 10: 64.20329256444316
Distance for route 11: 215.54065439158188
Distance for route 12: 135.79082271571278
1487.166010026267

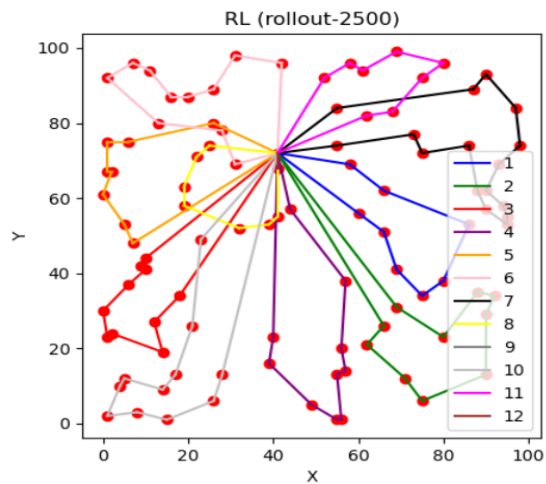


60 sec

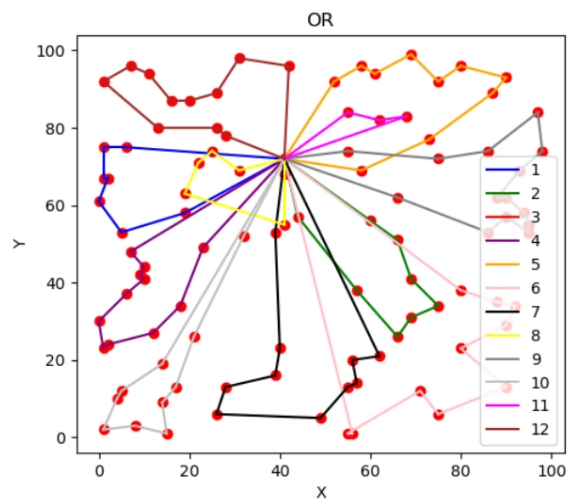
Distance for route 1: 137.68372378714244
Distance for route 2: 184.01264085044104
Distance for route 3: 113.00152433387976
Distance for route 4: 100.84581571555601
Distance for route 5: 153.97216833777438
Distance for route 6: 154.47398987199497
Distance for route 7: 143.66937910686138
Distance for route 8: 185.29089513830272
Distance for route 9: 115.00591892862272
Distance for route 10: 0.0
Distance for route 11: 130.31002892807243
1418.2660849986478



Distance for route 1: 124.6927385115229
Distance for route 2: 198.43036705036843
Distance for route 3: 143.66937910686138
Distance for route 4: 155.8654110006146
Distance for route 5: 114.37653348098578
Distance for route 6: 128.13736160903588
Distance for route 7: 175.69470310991431
Distance for route 8: 75.12847592892194
Distance for route 9: 0.0
Distance for route 10: 185.29089513830272
Distance for route 11: 101.62486134841508
Distance for route 12: 8.0
1410.9107262849432

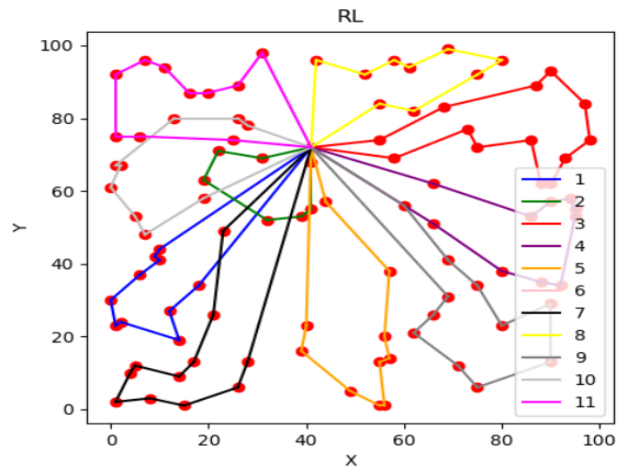


Distance for route 1: 105.82975096102305
Distance for route 2: 118.16752857342424
Distance for route 3: 0.0
Distance for route 4: 138.30666871433215
Distance for route 5: 126.84079999932935
Distance for route 6: 212.34379284582673
Distance for route 7: 177.45221800337706
Distance for route 8: 71.44660043869327
Distance for route 9: 159.748210832539
Distance for route 10: 172.8407219902884
Distance for route 11: 60.95672080839101
Distance for route 12: 123.2237243572212
1467.1567375244456

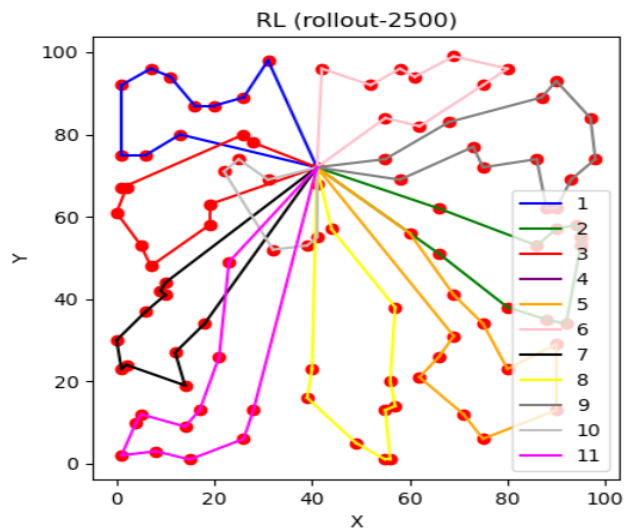


180 sec

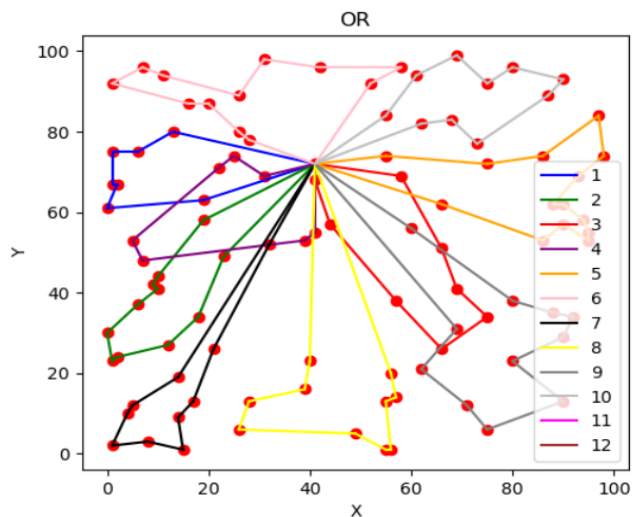
Distance for route 1: 147.4568958121906
Distance for route 2: 125.91333887569972
Distance for route 3: 0.0
Distance for route 4: 155.8654110006146
Distance for route 5: 185.29089513830272
Distance for route 6: 114.96708563079346
Distance for route 7: 111.67906443312843
Distance for route 8: 156.0105598164477
Distance for route 9: 143.66937910686138
Distance for route 10: 189.6716470528989
Distance for route 11: 72.13273601405905
1402.6570128809967



Distance for route 1: 128.48529061282687
Distance for route 2: 147.4568958121906
Distance for route 3: 111.85818305458388
Distance for route 4: 0.0
Distance for route 5: 189.6716470528989
Distance for route 6: 114.96708563079346
Distance for route 7: 143.66937910686138
Distance for route 8: 155.8654110006146
Distance for route 9: 156.0105598164477
Distance for route 10: 70.86360236213204
Distance for route 11: 185.29089513830272
1404.138949587652

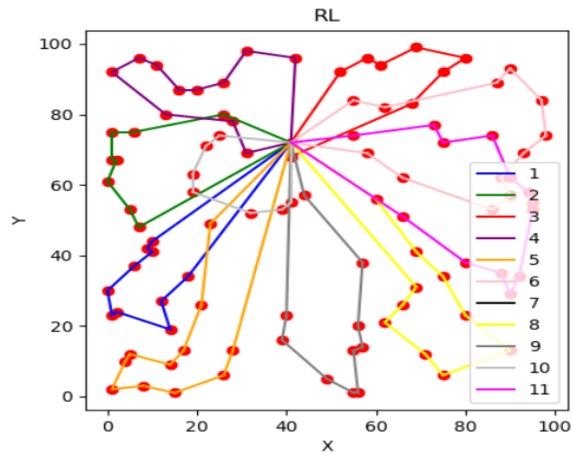


Distance for route 1: 100.92202196705367
Distance for route 2: 134.40949121886635
Distance for route 3: 122.08532076765405
Distance for route 4: 104.85389509150036
Distance for route 5: 159.748210832539
Distance for route 6: 141.18430475336734
Distance for route 7: 172.84072199028842
Distance for route 8: 180.47662798640894
Distance for route 9: 193.9503383168791
Distance for route 10: 126.18945685998591
Distance for route 11: 0.0
Distance for route 12: 0.0
1436.6603897845432

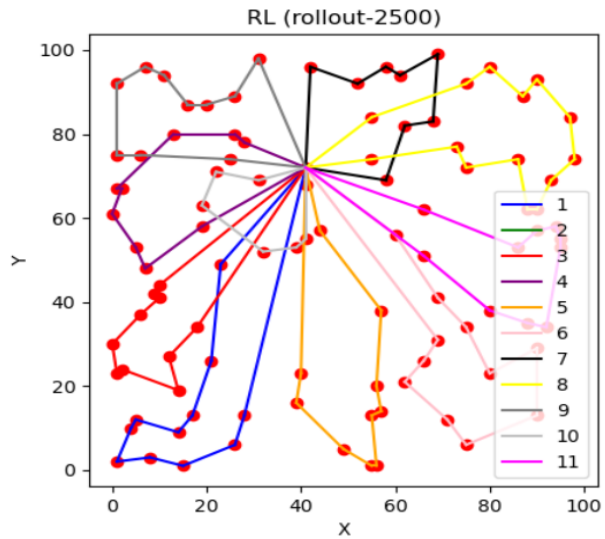


300 sec

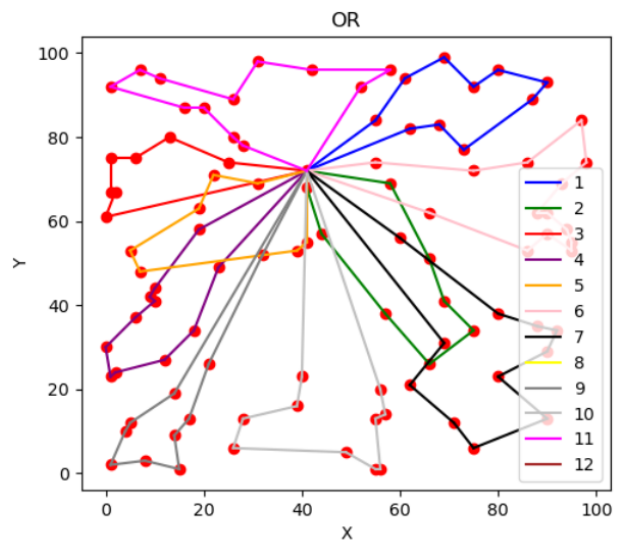
Distance for route 1: 143.66937910686138
Distance for route 2: 114.37653348098578
Distance for route 3: 107.16958254185184
Distance for route 4: 128.13736160903588
Distance for route 5: 185.29089513830272
Distance for route 6: 154.6722852968359
Distance for route 7: 0.0
Distance for route 8: 176.15187888693922
Distance for route 9: 155.8654110006146
Distance for route 10: 75.12847592892194
Distance for route 11: 163.66790700322528
1404.1297099935746

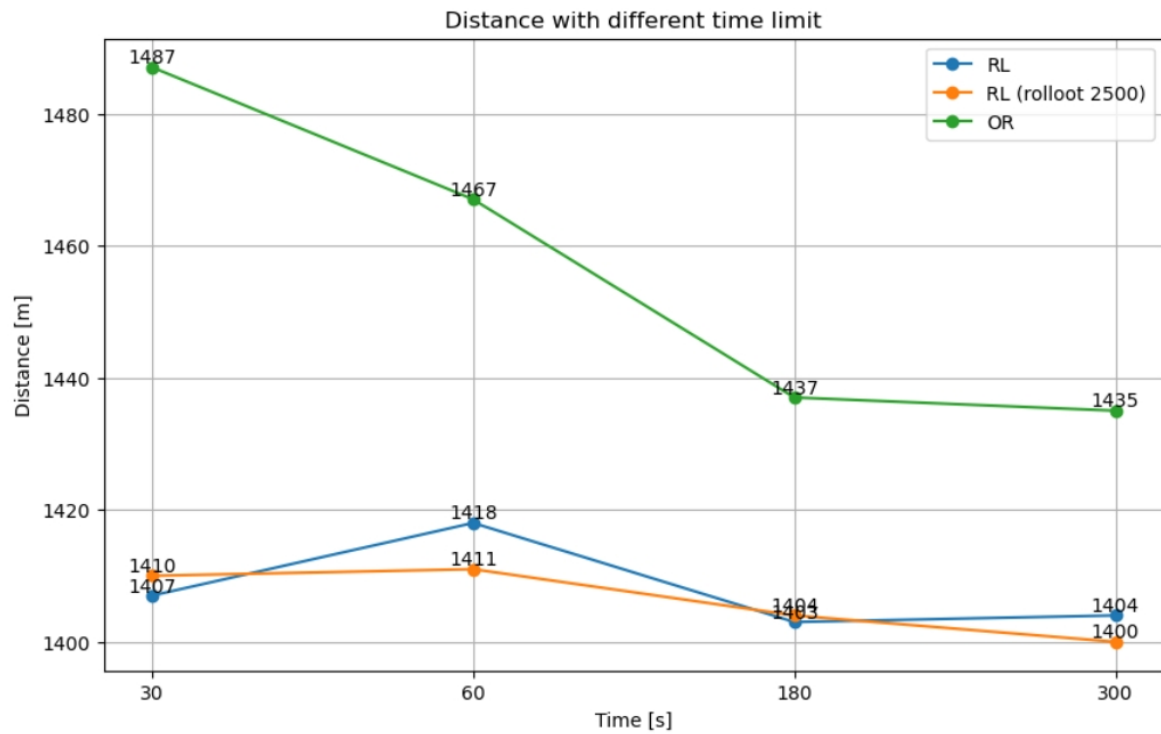


Distance for route 1: 185.29089513830272
Distance for route 2: 0.0
Distance for route 3: 143.66937910686138
Distance for route 4: 111.67906443312843
Distance for route 5: 155.8654110006146
Distance for route 6: 189.67164705289886
Distance for route 7: 108.01991795419333
Distance for route 8: 160.54229107686544
Distance for route 9: 125.91333887569974
Distance for route 10: 72.13273601405905
Distance for route 11: 147.4568958121906
1400.2415764648142



Distance for route 1: 126.18945685998594
Distance for route 2: 122.08532076765405
Distance for route 3: 100.91777450255746
Distance for route 4: 134.40949121886635
Distance for route 5: 103.0103666588902
Distance for route 6: 159.748210832539
Distance for route 7: 193.9503383168791
Distance for route 8: 0.0
Distance for route 9: 172.84072199028842
Distance for route 10: 180.47662798640894
Distance for route 11: 141.18430475336734
Distance for route 12: 0.0
1434.8126138874368





Problem = 100 (New)

30s

Distance for route 1: 199.63803996194795
 Distance for route 2: 247.09374032359733
 Distance for route 3: 0.0
 Distance for route 4: 64.88301166655619
 Distance for route 5: 218.88337301409072
 Distance for route 6: 158.73068728950344
 Distance for route 7: 194.60157862389437
 Distance for route 8: 165.34204388754432
 Distance for route 9: 171.38962288784327
 Distance for route 10: 0.0
 Distance for route 11: 82.9457899337814
 Distance for route 12: 96.27125166527144
 1599.7791392540303

Distance for route 1: 82.9457899337814
 Distance for route 2: 126.63354885875329
 Distance for route 3: 208.3811019336421
 Distance for route 4: 188.36997399399885
 Distance for route 5: 168.77417748200534
 Distance for route 6: 149.2558442037894
 Distance for route 7: 243.1371894840505
 Distance for route 8: 230.22335179896248
 Distance for route 9: 133.70412427439058
 Distance for route 10: 28.93270142486859
 Distance for route 11: 0.0
 1560.3578033882427

Distance for route 1: 124.12570435160617
 Distance for route 2: 75.16665951345216
 Distance for route 3: 202.35625203985424
 Distance for route 4: 230.22335179896254
 Distance for route 5: 176.13101263492646
 Distance for route 6: 100.6475807226193
 Distance for route 7: 244.22255943440905
 Distance for route 8: 171.40960754301489
 Distance for route 9: 177.28970853044655
 Distance for route 10: 64.88301166655619
 Distance for route 11: 0.0
 1566.4554482358476

60s

Distance for route 1: 199.63803996194795
 Distance for route 2: 247.09374032359733
 Distance for route 3: 0.0
 Distance for route 4: 64.88301166655619
 Distance for route 5: 218.88337301409072
 Distance for route 6: 158.73068728950344
 Distance for route 7: 194.60157862389437
 Distance for route 8: 165.34204388754432
 Distance for route 9: 171.38962288784327
 Distance for route 10: 0.0
 Distance for route 11: 82.9457899337814
 Distance for route 12: 96.27125166527144
 1599.7791392540303

Distance for route 1: 162.73823652188878
 Distance for route 2: 130.5520754855206
 Distance for route 3: 89.9967904524908
 Distance for route 4: 145.77023092890428
 Distance for route 5: 231.70527344137054
 Distance for route 6: 28.93270142486859
 Distance for route 7: 219.2015753948528
 Distance for route 8: 154.09038199954455
 Distance for route 9: 162.8448213382737
 Distance for route 10: 229.52947298708747
 Distance for route 11: 0.0
 1555.361559974802

Distance for route 1: 163.62451782535797
 Distance for route 2: 133.13776977815343
 Distance for route 3: 217.11186978404393
 Distance for route 4: 158.7941132012851
 Distance for route 5: 230.09329029769066
 Distance for route 6: 234.18758205794376
 Distance for route 7: 82.9457899337814
 Distance for route 8: 149.22878081691164
 Distance for route 9: 35.69074410470178
 Distance for route 10: 155.35387672013292
 Distance for route 11: 0.0
 1560.1683345200026

180 s

Distance for route 1: 239.83933945736038
 Distance for route 2: 183.80928513405118
 Distance for route 3: 82.9457899337814
 Distance for route 4: 37.19752076186837
 Distance for route 5: 207.4688683437981
 Distance for route 6: 194.50299878708825
 Distance for route 7: 228.78238044535337
 Distance for route 8: 0.0
 Distance for route 9: 125.92615577873897
 Distance for route 10: 109.72792159781834
 Distance for route 11: 170.77124875231192
 Distance for route 12: 0.0
 1580.9715089921704

Distance for route 1: 167.13266330646331
 Distance for route 2: 126.48871781798577
 Distance for route 3: 82.9457899337814
 Distance for route 4: 230.22335179896254
 Distance for route 5: 235.7602573350498
 Distance for route 6: 133.13776977815343
 Distance for route 7: 162.73823652188878
 Distance for route 8: 225.15537545454666
 Distance for route 9: 154.09038199954455
 Distance for route 10: 35.69074410470178
 Distance for route 11: 0.0
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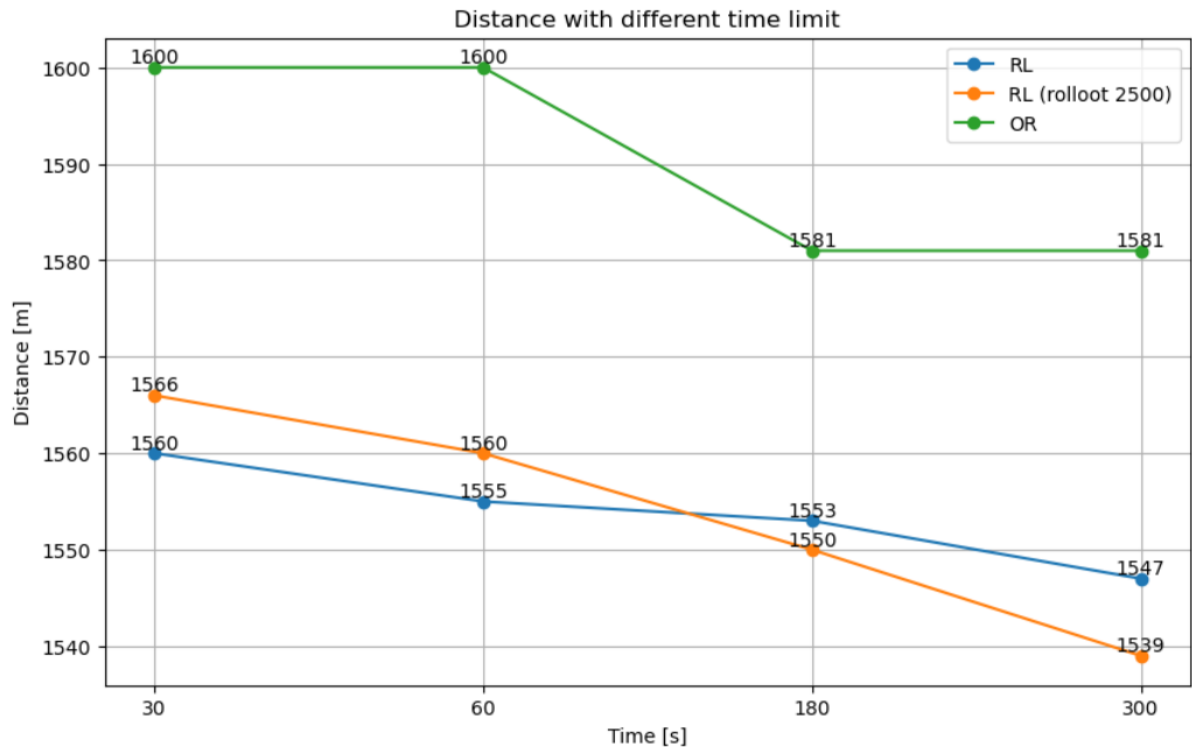
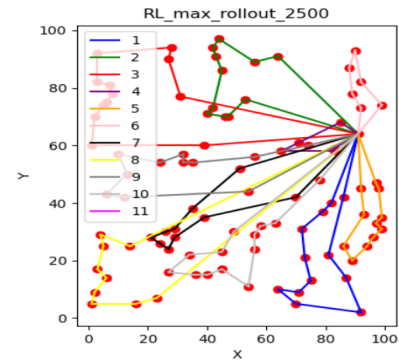
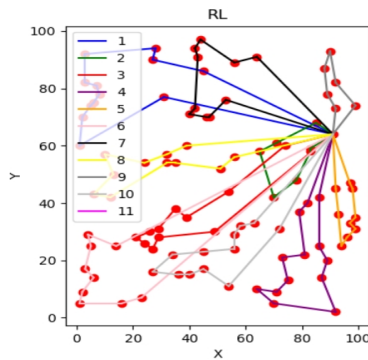
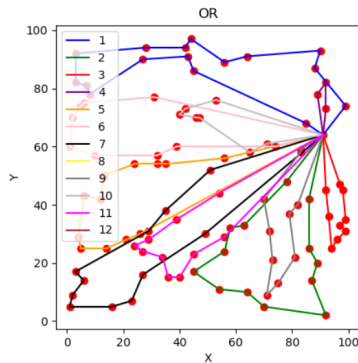
Distance for route 1: 144.5930290636836
 Distance for route 2: 235.23193674626515
 Distance for route 3: 64.88301166655619
 Distance for route 4: 83.99704558334251
 Distance for route 5: 82.9457899337814
 Distance for route 6: 231.7052734413705
 Distance for route 7: 180.3076401295752
 Distance for route 8: 189.19536176607525
 Distance for route 9: 173.0862440155959
 Distance for route 10: 164.28525056623323
 Distance for route 11: 0.0
 1550.230582912479

300s

Distance for route 1: 239.83933945736038
 Distance for route 2: 183.80928513405118
 Distance for route 3: 82.9457899337814
 Distance for route 4: 37.19752076186837
 Distance for route 5: 207.4688683437981
 Distance for route 6: 194.50299878708825
 Distance for route 7: 228.78238044535337
 Distance for route 8: 0.0
 Distance for route 9: 125.92615577873897
 Distance for route 10: 109.72792159781834
 Distance for route 11: 170.77124875231192
 Distance for route 12: 0.0
 1580.9715089921704

Distance for route 1: 231.86134704066086
 Distance for route 2: 77.94915795972165
 Distance for route 3: 169.1566028480306
 Distance for route 4: 168.77417748200537
 Distance for route 5: 82.9457899337814
 Distance for route 6: 235.23193674626512
 Distance for route 7: 143.8939565697427
 Distance for route 8: 190.98334118429642
 Distance for route 9: 64.88301166655619
 Distance for route 10: 181.03135182426587
 Distance for route 11: 0.0
 1546.7106732553261

Distance for route 1: 166.3086147746053
 Distance for route 2: 144.5930290636836
 Distance for route 3: 231.7052734413705
 Distance for route 4: 58.00576345798248
 Distance for route 5: 97.84085343371022
 Distance for route 6: 64.88301166655619
 Distance for route 7: 166.87260852300105
 Distance for route 8: 235.23193674626512
 Distance for route 9: 193.5652903751389
 Distance for route 10: 180.3076401295752
 Distance for route 11: 0.0
 1539.3140216118886



Problem = 150

30sec

Distance for route 1: 71.44350064531892	Distance for route 1: 74.30710320703024	Distance for route 1: 84.4063027102631
Distance for route 2: 164.3671631018354	Distance for route 2: 81.23842591583136	Distance for route 2: 131.37315995814805
Distance for route 3: 147.107557912447	Distance for route 3: 131.2272770696459	Distance for route 3: 79.15750613537114
Distance for route 4: 0.0	Distance for route 4: 119.14943528608919	Distance for route 4: 138.5920388340598
Distance for route 5: 148.31104146940905	Distance for route 5: 130.87559870959566	Distance for route 5: 117.83995964213162
Distance for route 6: 109.29186662471545	Distance for route 6: 149.22218866808365	Distance for route 6: 120.28371617724457
Distance for route 7: 230.9890183781012	Distance for route 7: 109.60826744541586	Distance for route 7: 152.66058614408598
Distance for route 8: 138.14317641635486	Distance for route 8: 102.06750900921975	Distance for route 8: 56.78332452651742
Distance for route 9: 122.79979981414566	Distance for route 9: 86.0179505667181	Distance for route 9: 179.99740446897908
Distance for route 10: 146.337598632641	Distance for route 10: 0.0	Distance for route 10: 121.60172700000086
Distance for route 11: 0.0	Distance for route 11: 153.66128002843698	Distance for route 11: 168.6149771030845
Distance for route 12: 161.2591209837158	Distance for route 12: 47.94061123551175	Distance for route 12: 91.2973014393843
Distance for route 13: 137.64994206692842	Distance for route 13: 110.38900547811375	Distance for route 13: 144.8974351998299
Distance for route 14: 89.86104581741432	Distance for route 14: 151.51531641372173	Distance for route 14: 83.91879537264222
Distance for route 15: 116.58256185549403	Distance for route 15: 152.33857145953743	Distance for route 15: 99.20912632229437
Distance for route 16: 75.41064237709506	Distance for route 16: 94.60232633517371	Distance for route 16: 147.1344473851036
Distance for route 17: 78.67158944578742	Distance for route 17: 94.65547721055768	Distance for route 17: 38.24351622669639
Distance for route 18: 0.0	Distance for route 18: 173.74763848189815	Distance for route 18: 0.0
Distance for route 19: 115.99127058886125	1962.563982520581	1956.011324645837
Distance for route 20: 47.953630733938915		
2102.170526864204		

60 sec

Distance for route 1: 152.07923912245883	Distance for route 1: 138.90327611155104	Distance for route 1: 112.50085747493453
Distance for route 2: 164.36896644758502	Distance for route 2: 44.83822296484303	Distance for route 2: 0.0
Distance for route 3: 142.4693346959081	Distance for route 3: 151.5153164137218	Distance for route 3: 122.40585311308362
Distance for route 4: 139.86934783175306	Distance for route 4: 143.61511659167593	Distance for route 4: 186.3445579101356
Distance for route 5: 138.46240777597586	Distance for route 5: 67.02520589543502	Distance for route 5: 140.18262717953894
Distance for route 6: 75.01722677075266	Distance for route 6: 94.18899173024434	Distance for route 6: 137.00139438917324
Distance for route 7: 154.53528055850919	Distance for route 7: 155.44725169014808	Distance for route 7: 107.26620323207636
Distance for route 8: 137.64994206692842	Distance for route 8: 123.23307029627465	Distance for route 8: 44.83822296484303
Distance for route 9: 162.606403626583	Distance for route 9: 81.42237997740406	Distance for route 9: 64.3607974040595
Distance for route 10: 123.84233852312528	Distance for route 10: 93.48957745743648	Distance for route 10: 87.05778488752263
Distance for route 11: 39.453178569939226	Distance for route 11: 133.8679366653854	Distance for route 11: 92.99832876602298
Distance for route 12: 91.95940176204093	Distance for route 12: 120.5421806824827	Distance for route 12: 137.6594287854241
Distance for route 13: 116.58256185549403	Distance for route 13: 117.5244842683317	Distance for route 13: 132.05389170728105
Distance for route 14: 75.41064237709506	Distance for route 14: 86.05765324108943	Distance for route 14: 134.82285088107523
Distance for route 15: 78.67158944578742	Distance for route 15: 131.2272770696459	Distance for route 15: 74.30710320703024
Distance for route 16: 126.31879224881058	Distance for route 16: 174.54843745228834	Distance for route 16: 116.58256185549402
Distance for route 17: 115.99127058886125	Distance for route 17: 94.60232633517371	Distance for route 17: 163.24137969068624
Distance for route 18: 0.0	Distance for route 18: 0.0	Distance for route 18: 96.2716856954838
2035.2879242676079	1952.0487048431312	1949.8955291438651

180 sec

Distance for route 1: 159.5416637898421	Distance for route 1: 0.0	Distance for route 1: 0.0
Distance for route 2: 139.86934783175306	Distance for route 2: 92.32687950974943	Distance for route 2: 155.44725169014808
Distance for route 3: 134.63693331397604	Distance for route 3: 118.68846122989122	Distance for route 3: 110.1663814057725
Distance for route 4: 138.46240777597586	Distance for route 4: 129.1366630767309	Distance for route 4: 186.35372176021832
Distance for route 5: 154.53528055850919	Distance for route 5: 155.44725169014808	Distance for route 5: 112.39816142410108
Distance for route 6: 143.1423476091537	Distance for route 6: 121.02037172172366	Distance for route 6: 94.60232633517371
Distance for route 7: 121.80336087381288	Distance for route 7: 94.60232633517371	Distance for route 7: 89.38977820997155
Distance for route 8: 137.64994206692842	Distance for route 8: 112.39816142410106	Distance for route 8: 131.37315995814805
Distance for route 9: 166.66927101707722	Distance for route 9: 122.40585311308362	Distance for route 9: 120.28371617724457
Distance for route 10: 124.21606271691095	Distance for route 10: 109.75124301590554	Distance for route 10: 122.40585311308362
Distance for route 11: 39.453178569939226	Distance for route 11: 50.9600886018939	Distance for route 11: 143.4051676105017
Distance for route 12: 116.58256185549403	Distance for route 12: 135.6431408840069	Distance for route 12: 75.52436337130516
Distance for route 13: 75.41064237709506	Distance for route 13: 143.40516761050168	Distance for route 13: 40.85369125113076
Distance for route 14: 0.0	Distance for route 14: 56.783324526517404	Distance for route 14: 108.26844365522882
Distance for route 15: 78.67158944578742	Distance for route 15: 80.85007601222767	Distance for route 15: 56.78332452651742
Distance for route 16: 77.84725827589983	Distance for route 16: 138.903276111551	Distance for route 16: 135.6431408840069
Distance for route 17: 115.99127058886125	Distance for route 17: 105.27219772210364	Distance for route 17: 117.5244842683317
Distance for route 18: 91.95940176204091	Distance for route 18: 186.35372176021832	Distance for route 18: 138.90327611155104
2016.4425204290571	1953.9482043455278	1939.326241752435

300 sec

Distance for route 1: 130.02483040007735
 Distance for route 2: 125.8695808863156
 Distance for route 3: 139.24585291419982
 Distance for route 4: 118.04332819977762
 Distance for route 5: 137.64994206692842
 Distance for route 6: 160.034757364525
 Distance for route 7: 143.1423476091537
 Distance for route 8: 166.66927101707722
 Distance for route 9: 41.981182164027246
 Distance for route 10: 0.0
 Distance for route 11: 91.95940176204093
 Distance for route 12: 116.58256185549403
 Distance for route 13: 75.41064237709506
 Distance for route 14: 134.52691354659035
 Distance for route 15: 78.67158944578742
 Distance for route 16: 77.71274183994561
 Distance for route 17: 115.99127058886125
 Distance for route 18: 154.53528055850919
 2008.0514945964057

Distance for route 1: 108.30181348425
 Distance for route 2: 122.40585311308362
 Distance for route 3: 108.26844365522882
 Distance for route 4: 135.0272936931802
 Distance for route 5: 127.0386322150519
 Distance for route 6: 138.903276111551
 Distance for route 7: 75.52436337130516
 Distance for route 8: 176.05169227524803
 Distance for route 9: 89.459224755227337
 Distance for route 10: 155.44725169014808
 Distance for route 11: 41.90470346375649
 Distance for route 12: 51.35121259095352
 Distance for route 13: 117.52448426833172
 Distance for route 14: 132.17827676975094
 Distance for route 15: 99.30967092701056
 Distance for route 16: 143.61511659167593
 Distance for route 17: 133.8679366653854
 Distance for route 18: 0.0
 1956.179245638185

Distance for route 1: 90.52283144087274
 Distance for route 2: 0.0
 Distance for route 3: 103.31731740303725
 Distance for route 4: 117.52448426833172
 Distance for route 5: 44.83822296484303
 Distance for route 6: 147.55655637212365
 Distance for route 7: 64.3607974040595
 Distance for route 8: 167.64347866926806
 Distance for route 9: 78.6715894457874
 Distance for route 10: 135.63769539646938
 Distance for route 11: 137.00139438917324
 Distance for route 12: 122.40585311308362
 Distance for route 13: 123.95535295186828
 Distance for route 14: 138.903276111551
 Distance for route 15: 187.4752125668752
 Distance for route 16: 108.26844365522882
 Distance for route 17: 96.03945385142954
 Distance for route 18: 78.67180508113475
 1942.793765085137

Best results:

