

Q1 — Random cities

Initial temp= 10000000000.0

Final temp= 2.127951970682161e-53

alpha=0.97

['Xinzhou', 'Hamar', 'Phatthalung', 'Donegal', 'Kanash', 'Shilka', 'Chiquimula', 'Pasadena',  
'Chitipa', 'Baker Lake', 'Mansfield', 'Kumbo', 'Celaya', 'Janauba', 'Bamako', 'Otaru', 'Kamina',  
'Los Alamos', 'Taubate', 'Tyumen', 'Arroyos y Esteros', 'Yoshkar Ola', 'Orsha', 'Salcedo',  
'Ziguinchor', 'Laurel', 'Ponta Delgada', 'Shostka', 'Cabo de Santo Agostinho', 'Tranqueras']

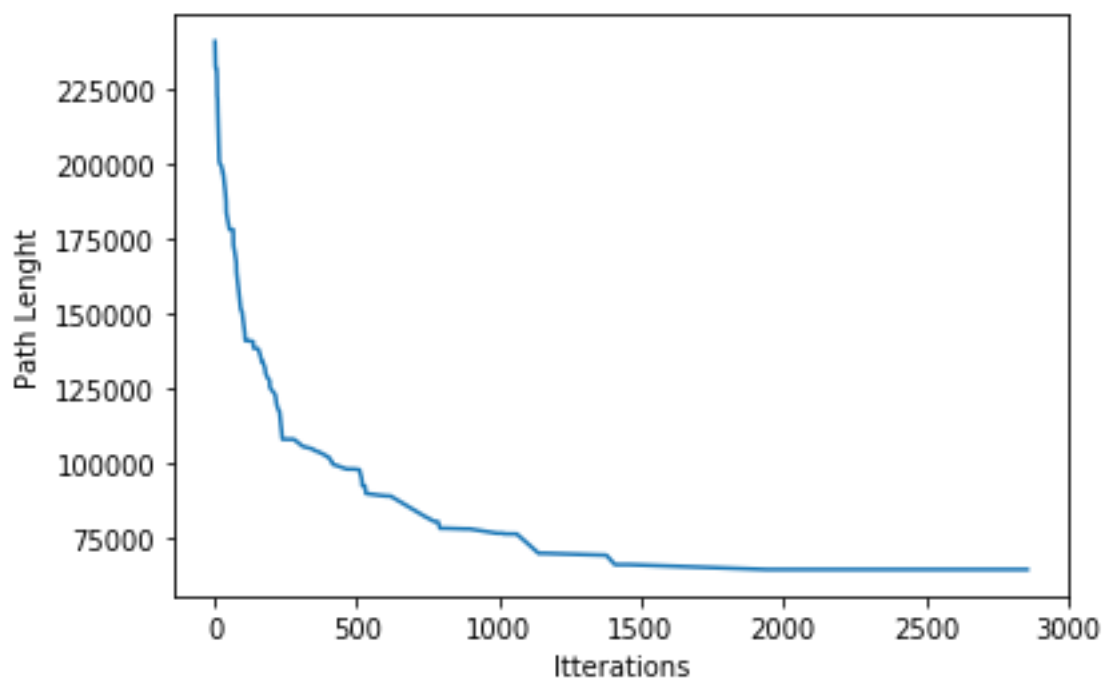
Pre-annealing: path length 275000



Pre-annealing: path length 70000



Pre-annealing: path length 90000



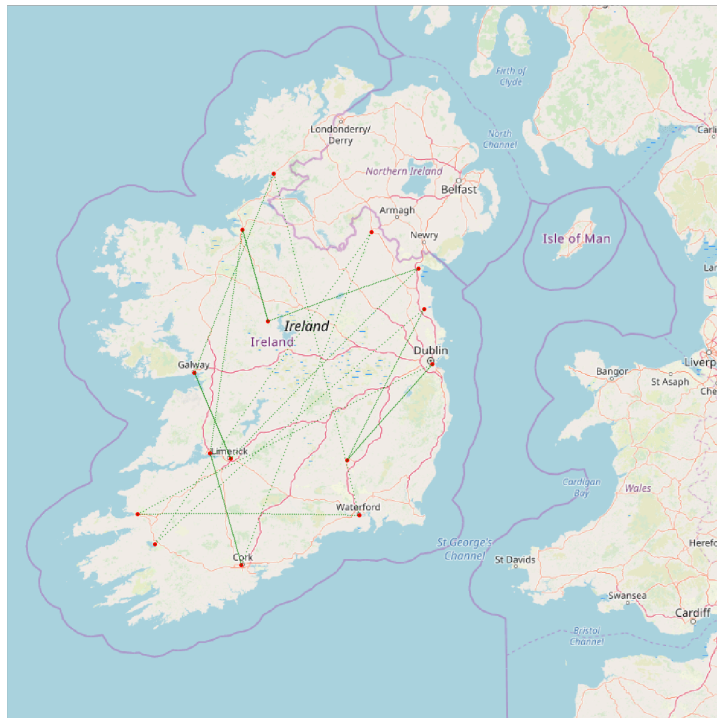
Irish cities:

Initial temp= 10000000000.0

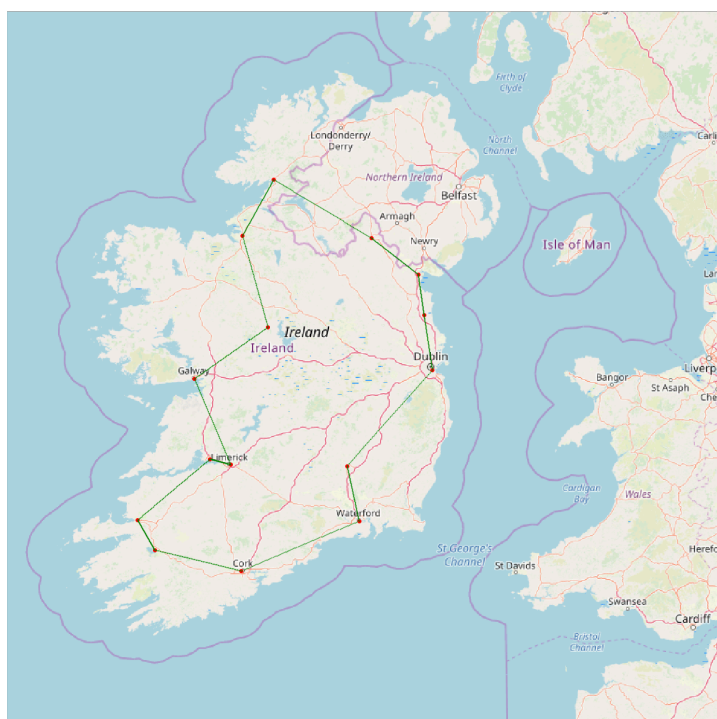
Final temp= 1.4816740453665154e-54

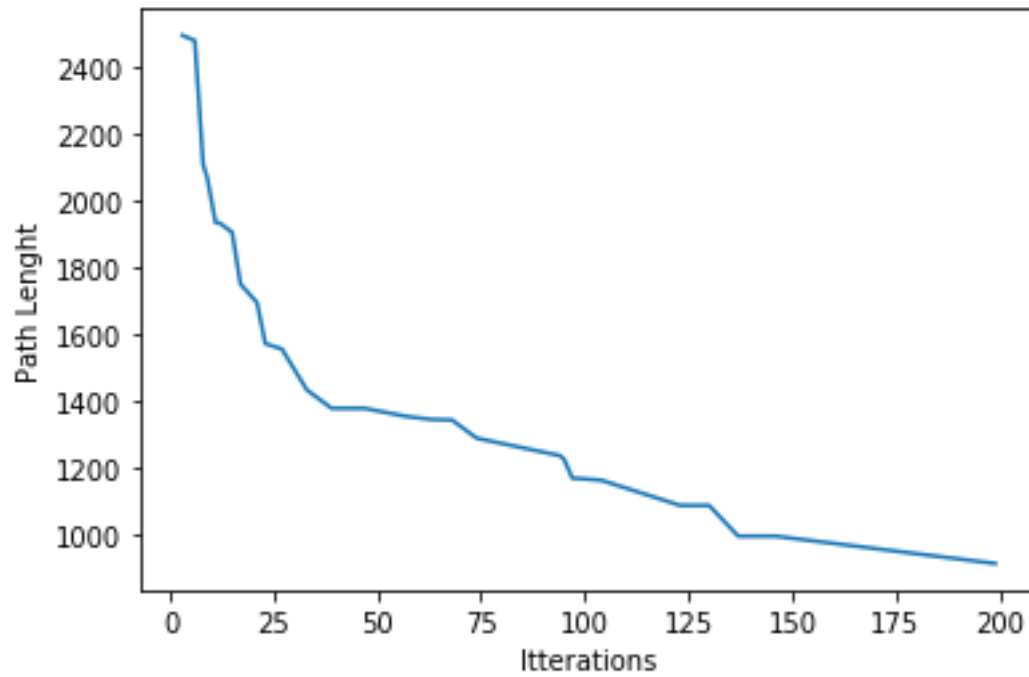
['Ros Comain', 'Muineachan', 'Shannon', 'Waterford', 'Tralee', 'Donegal', 'Drogheda', 'Dundalk', 'Galway', 'Kilkenny', 'Killarney', 'Sligo', 'Cork', 'Limerick', 'Dublin']

Pre-annealing: path length 2650



Post-annealing: path length 1000





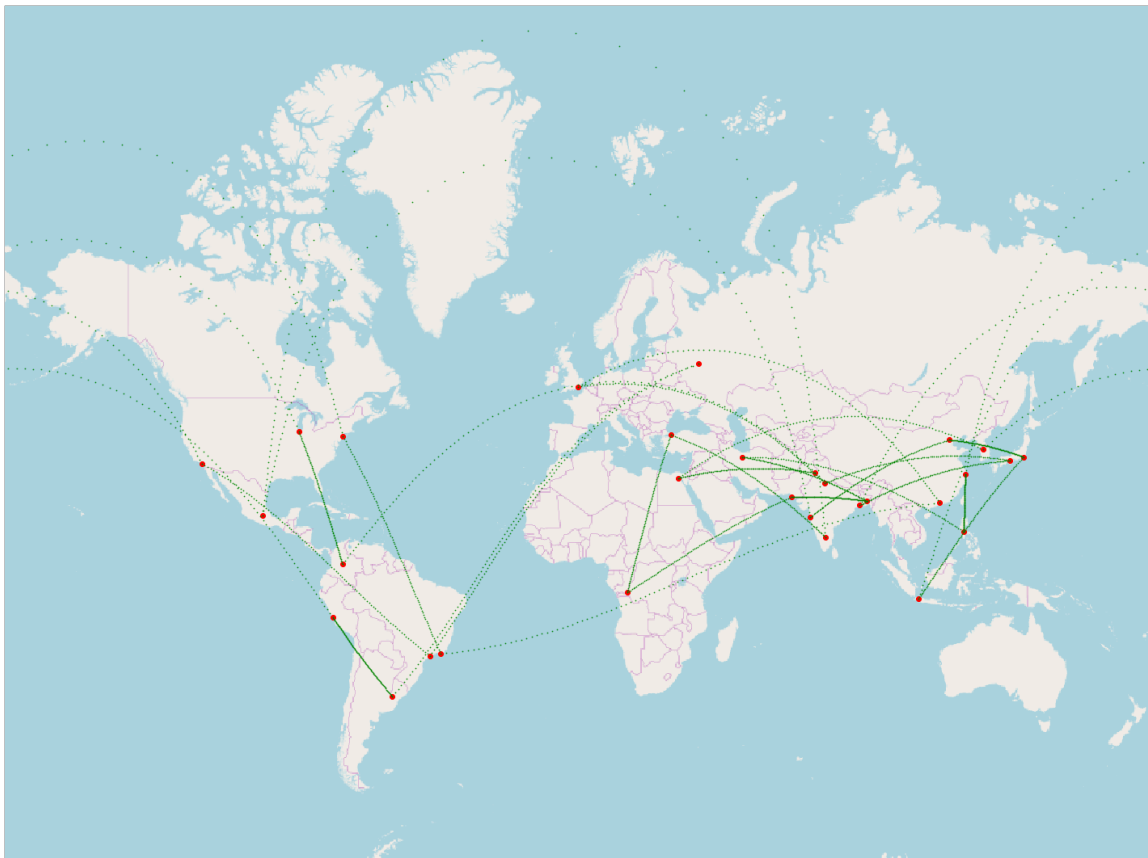
Q3 — largest populations

Initial temp= 100000000000.0

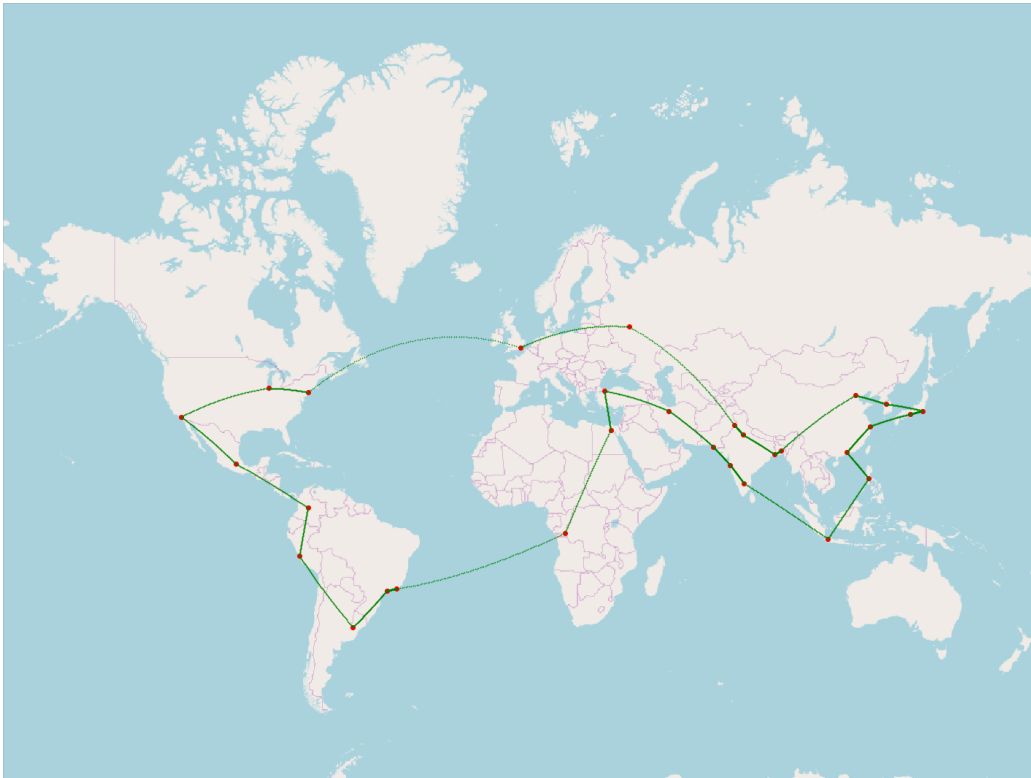
Final temp= 1.886289090288255e-165

largest populations: ['Tokyo', 'Mumbai', 'Mexico City', 'Shanghai', 'Sao Paulo', 'New York', 'Karachi', 'Buenos Aires', 'Delhi', 'Moscow', 'Istanbul', 'Dhaka', 'Cairo', 'Seoul', 'Kolkata', 'Beijing', 'Jakarta', 'Los Angeles', 'London', 'Tehran', 'Lima', 'Manila', 'Bogota', 'Osaka', 'Rio de Janeiro', 'Kinshasa', 'Lahore', 'Guangzhou', 'Bangalore', 'Chicago']

Pre-annealing: path length = 225000



Post-annealing: path length =70000, 2500 iterations



Pre-annealing: path length = 225000

