

A) Number of individuals

i) 5 individuals



Figure 1: After first 1000th generation



Figure 2: After first 2000th generation



Figure 3: After first 3000th generation



Figure 4: After first 4000th generation



Figure 5: After first 5000th generation



Figure 6: After first 6000th generation



Figure 7: After first 7000th generation



Figure 8: After first 8000th generation



Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

ii) 10 individuals



Figure 1: After first 1000th generation

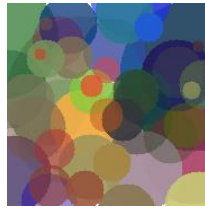


Figure 2: After first 2000th generation



Figure 3: After first 3000th generation



Figure 4: After first 4000th generation



Figure 5: After first 5000th generation



Figure 6: After first 6000th generation



Figure 7: After first 7000th generation



Figure 8: After first 8000th generation



Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

iii) 20 individuals



Figure 1: After first 1000th generation



Figure 2: After first 2000th generation



Figure 3: After first 3000th generation



Figure 4: After first 4000th generation



Figure 5: After first 5000th generation



Figure 6: After first 6000th generation



Figure 7: After first 7000th generation



Figure 8: After first 8000th generation



Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

iii) 40 individuals

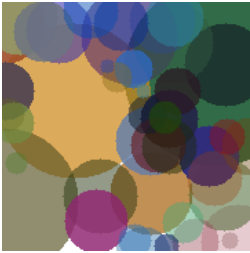


Figure 1: After first 1000th generation



Figure 2: After first 2000th generation



Figure3: After first 3000th generation



Figure 4: After first 4000th generation



Figure 5: After first 5000th generation



Figure 6: After first 6000th generation



Figure 7: After first 7000th generation



Figure 8: After first 8000th generation



Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

iv) 60 individuals



Figure 1: After first 1000th generation



Figure 2: After first 2000th generation



Figure 3: After first 3000th generation



Figure 4: After first 4000th generation



Figure 5: After first 5000th generation



Figure 6: After first 6000th generation



Figure 7: After first 7000th generation



Figure 8: After first 8000th generation

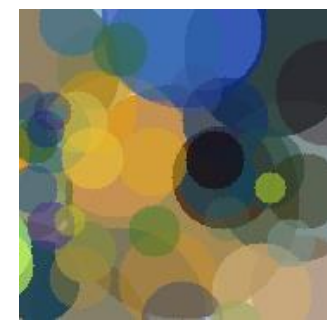


Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

B) Number of genes

i) 15 genes



Figure 1: After first 1000th generation

Figure 2: After first 2000th generation

Figure 3: After first 3000th generation



Figure 4: After first 4000th generation

Figure 5: After first 5000th generation

Figure 6: After first 6000th generation



Figure 7: After first 7000th generation

Figure 8: After first 8000th generation

Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

ii) 30 genes



Figure 1: After first 1000th generation



Figure 2: After first 2000th generation



Figure 3: After first 3000th generation



Figure 4: After first 4000th generation



Figure 5: After first 5000th generation



Figure 6: After first 6000th generation

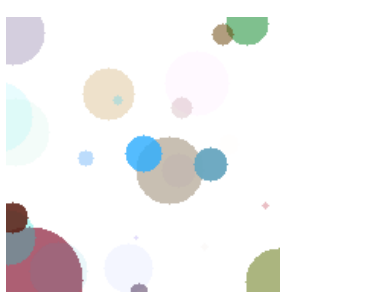


Figure 7: After first 7000th generation



Figure 8: After first 8000th generation



Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

iii) 80 genes



Figure 1: After first 1000th generation



Figure 2: After first 2000th generation



Figure 3: After first 3000th generation



Figure 4: After first 4000th generation



Figure 5: After first 5000th generation



Figure 6: After first 6000th generation



Figure 7: After first 7000th generation



Figure 8: After first 8000th generation



Figure 9: After first 9000th generation



Figure 7: After first 7000th generation

iv) 120 genes



Figure 1: After first 1000th generation



Figure 2: After first 2000th generation



Figure 3: After first 3000th generation



Figure 4: After first 4000th generation



Figure 5: After first 5000th generation



Figure 6: After first 6000th generation

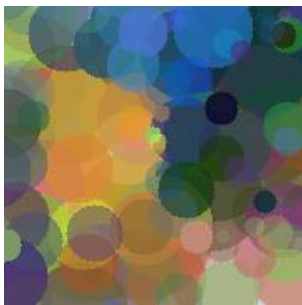


Figure 7: After first 7000th generation



Figure 8: After first 8000th generation



Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

C) Tournament size

i) 2 tournament



Figure 1: After first 1000th generation



Figure 2: After first 2000th generation



Figure 3: After first 3000th generation



Figure 4: After first 4000th generation



Figure 5: After first 5000th generation



Figure 6: After first 6000th generation



Figure 7: After first 7000th generation



Figure 8: After first 8000th generation



Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

ii) 8 tournament

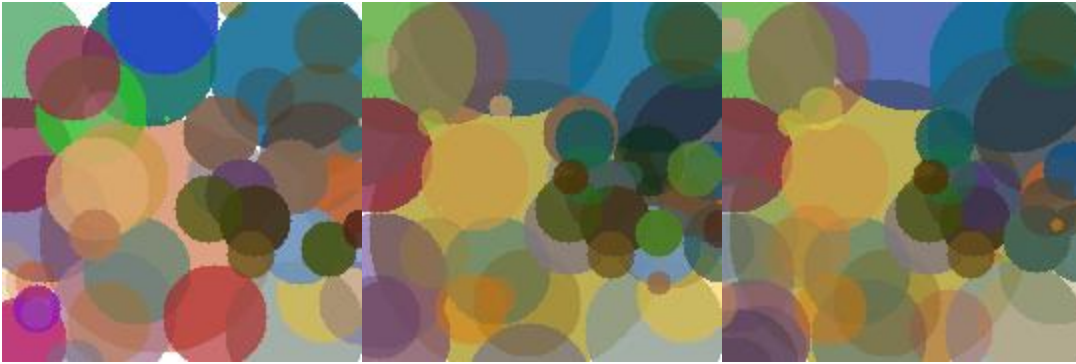


Figure 1: After first 1000th generation

Figure 2: After first 2000th generation

Figure 3: After first 3000th generation

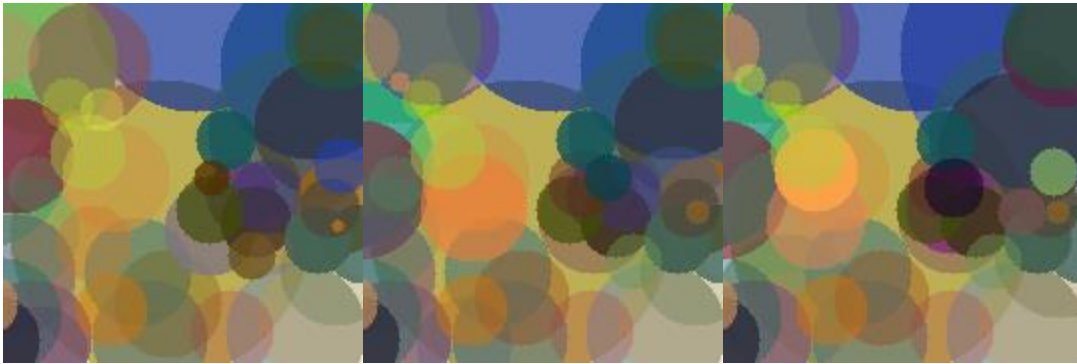


Figure 4: After first 4000th generation

Figure 5: After first 5000th generation

Figure 6: After first 6000th generation



Figure 7: After first 7000th generation

Figure 8: After first 8000th generation

Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

iii) 16 tournament



Figure 1: After first 1000th generation

Figure 2: After first 2000th generation

Figure 3: After first 3000th generation



Figure 4: After first 4000th generation

Figure 5: After first 5000th generation

Figure 6: After first 6000th generation



Figure 7: After first 7000th generation

Figure 8: After first 8000th generation

Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

D) Number of parents to be used in crossover

i) 0.4



Figure 1: After first 1000th generation

Figure 2: After first 2000th generation

Figure 3: After first 3000th generation



Figure 4: After first 4000th generation

Figure 5: After first 5000th generation

Figure 6: After first 6000th generation



Figure 7: After first 7000th generation

Figure 8: After first 8000th generation

Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

ii) 0.15



Figure 1: After first 1000th generation

Figure 2: After first 2000th generation

Figure 3: After first 3000th generation



Figure 4: After first 4000th generation

Figure 5: After first 5000th generation

Figure 6: After first 6000th generation



Figure 7: After first 7000th generation

Figure 8: After first 8000th generation

Figure 9: After first 9000th generation



Figure 10: After first 10000th generation

iii) 0.75

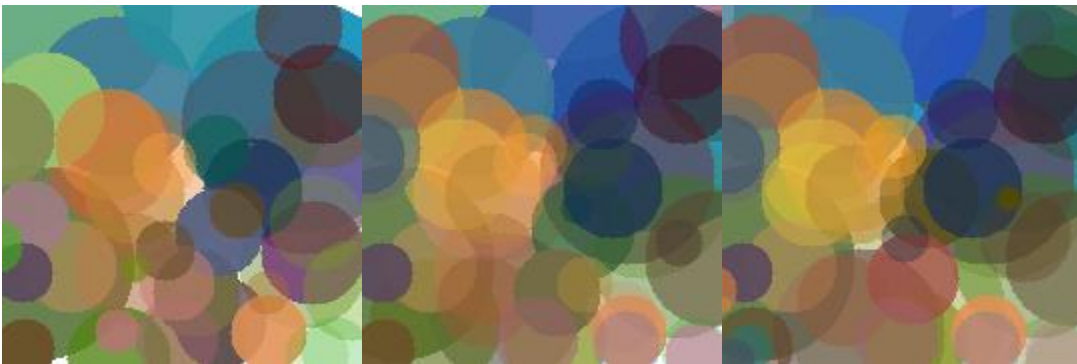


Figure 1: After first 1000th generation

Figure 2: After first 2000th generation

Figure 3: After first 3000th generation



Figure 4: After first 4000th generation

Figure 5: After first 5000th generation

Figure 6: After first 6000th generation



Figure 7: After first 7000th generation

Figure 8: After first 8000th generation

Figure 9: After first 9000th generation

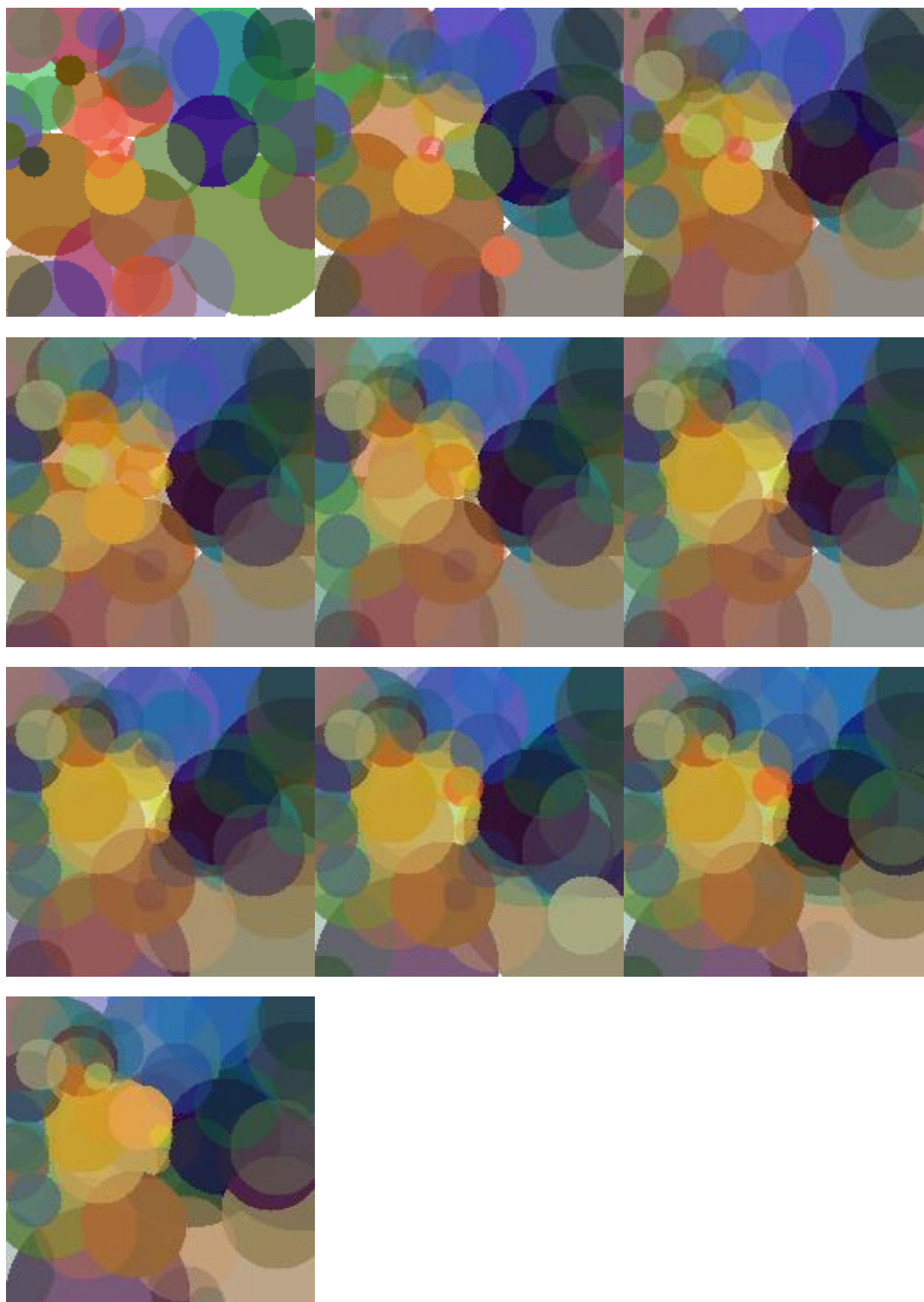


Figure 10: After first 10000th generation

E) Number of individuals advancing without change

i) 0.35

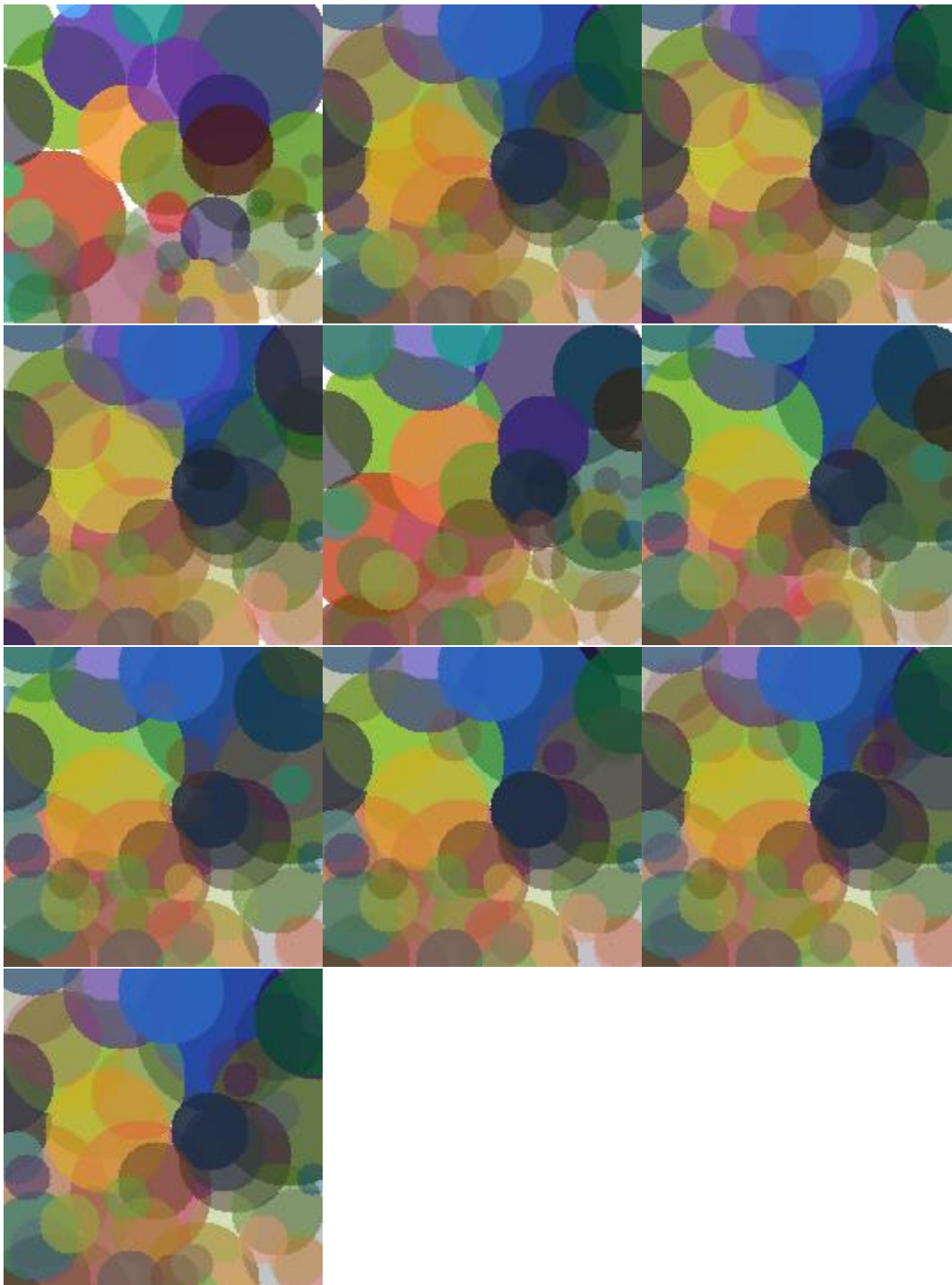
(Figures are arranged in the same order.)



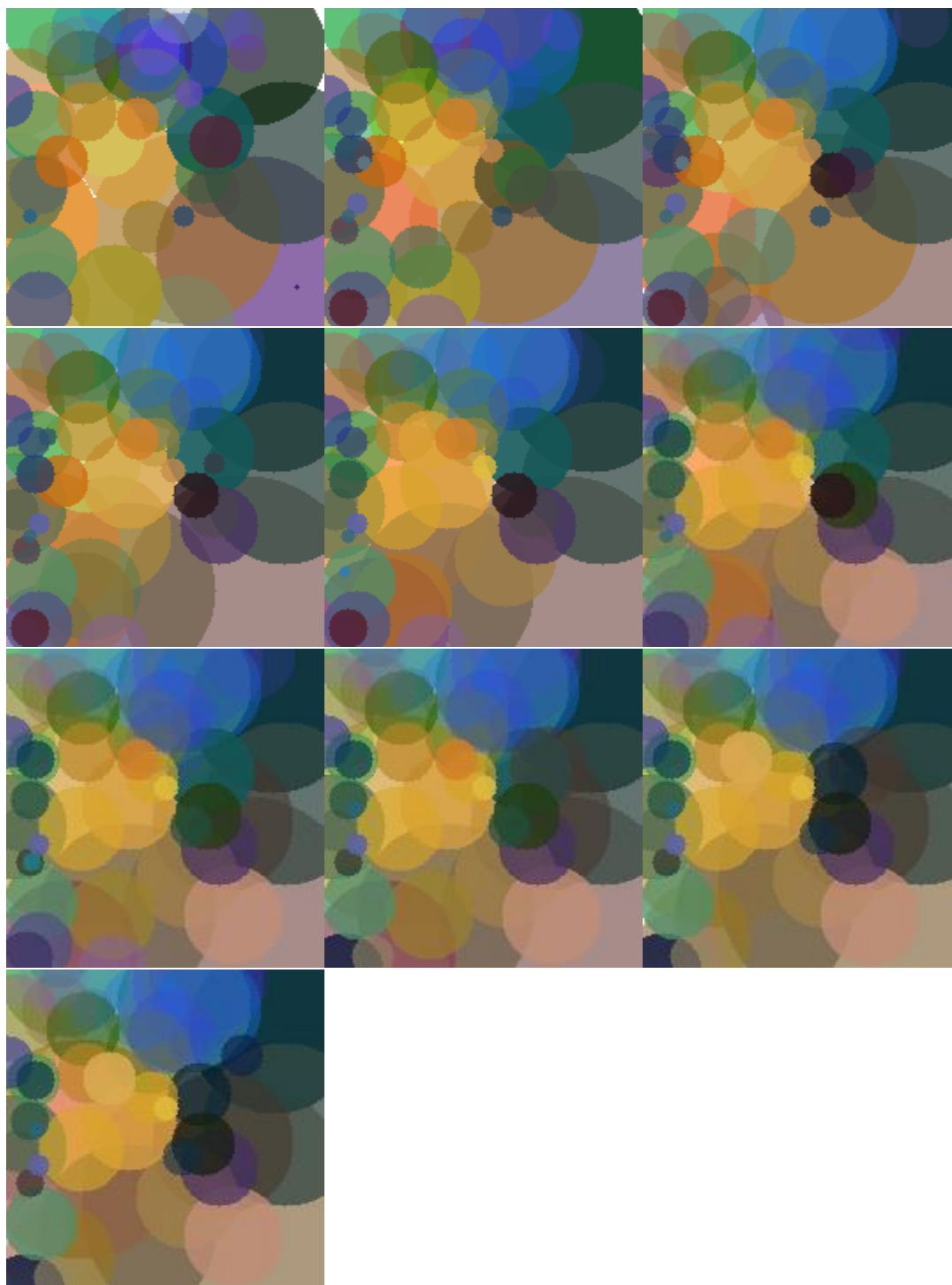
ii) 0.04

F) Mutation probability

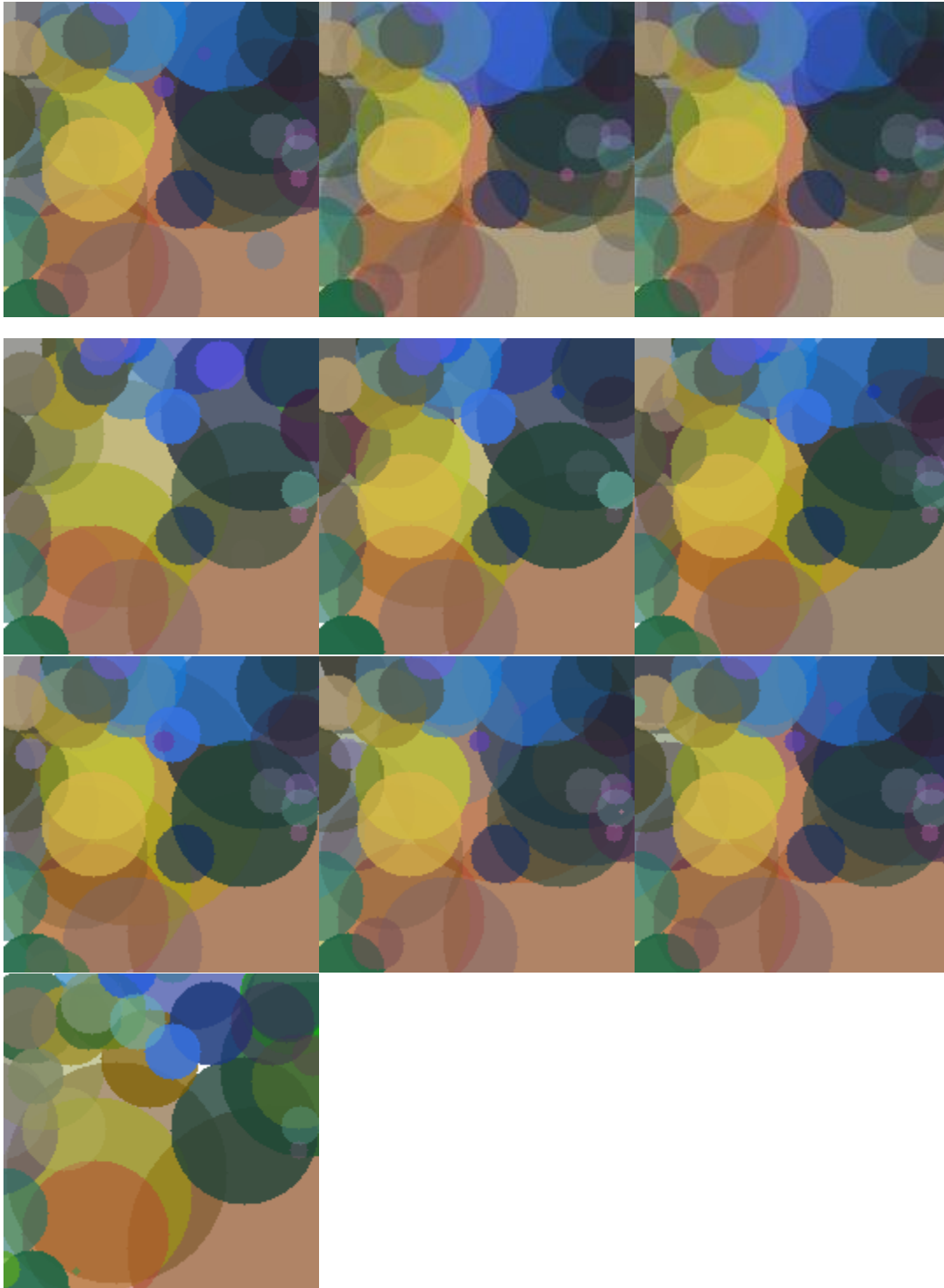
i) 0.1



ii) 0.4

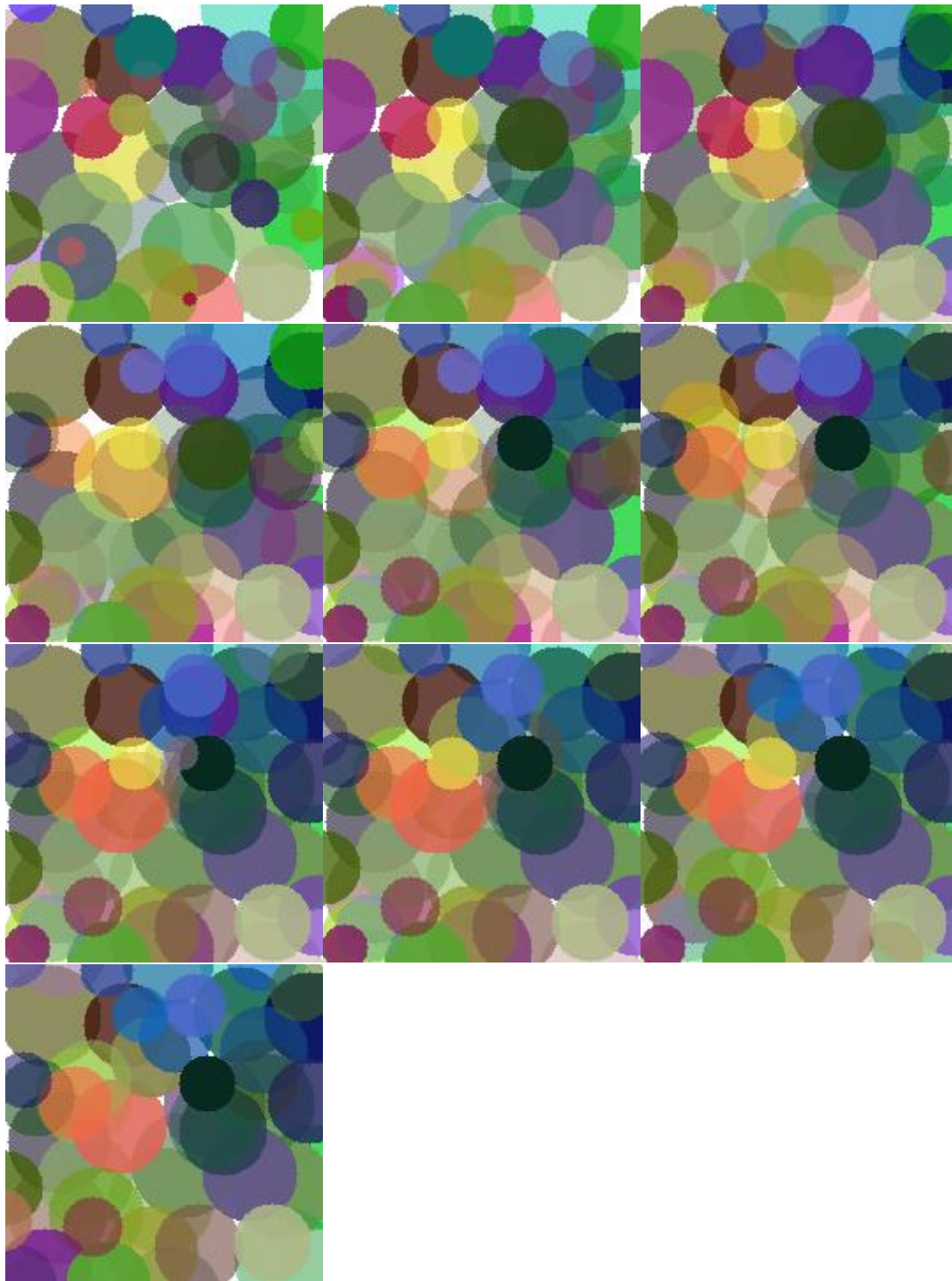


iii)0.75



G) Mutation type

i) unguided



2 - Experimental Work – Fitnesses

A)Num_genes

i)5

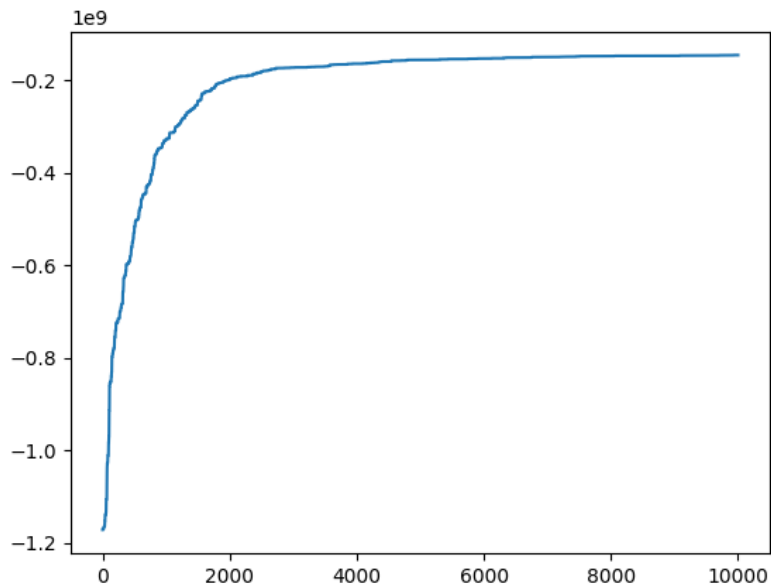


Figure 1: Generation 1 to 10000

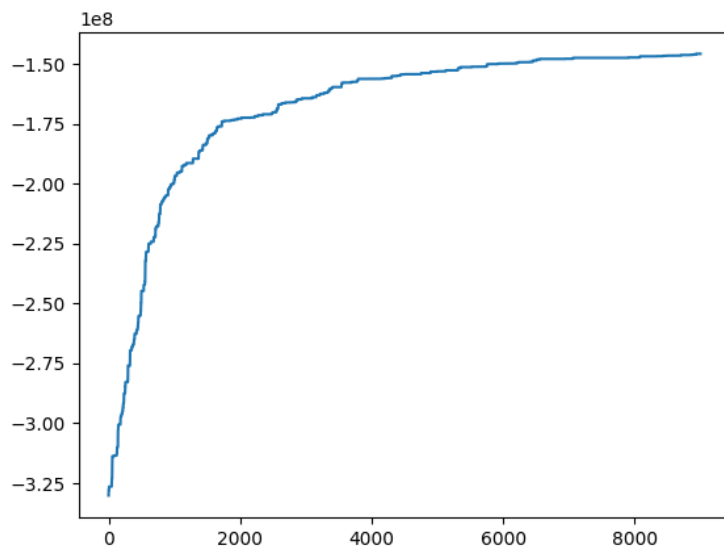


Figure 2: Generation 1000 to 10000

ii)10

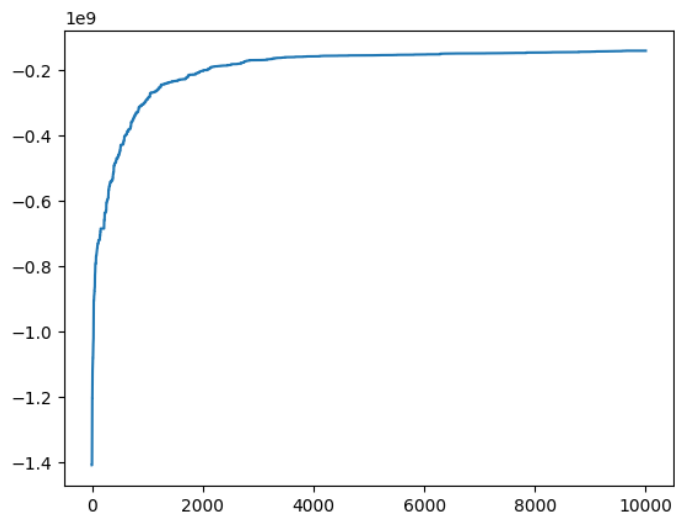


Figure 1: Generation 1 to 10000

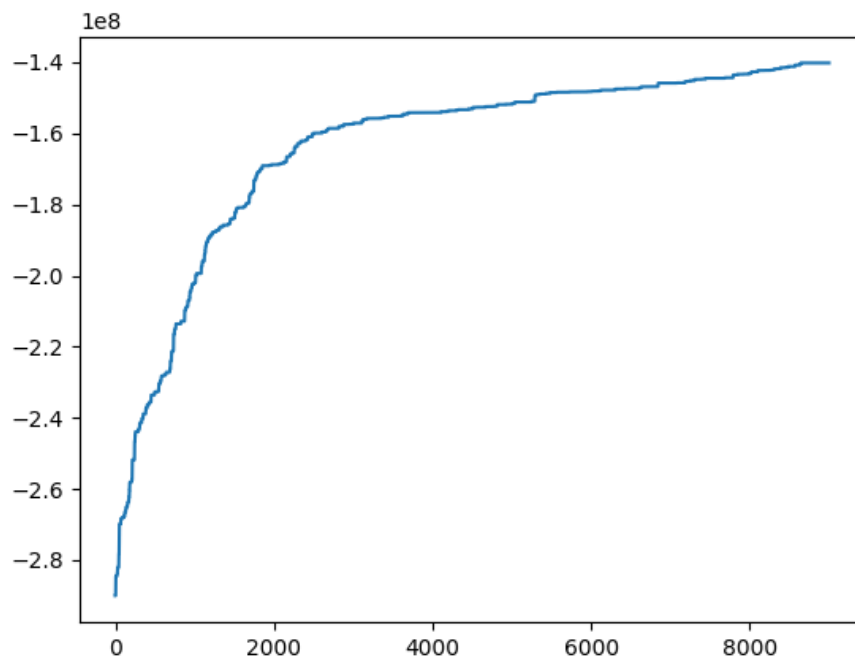
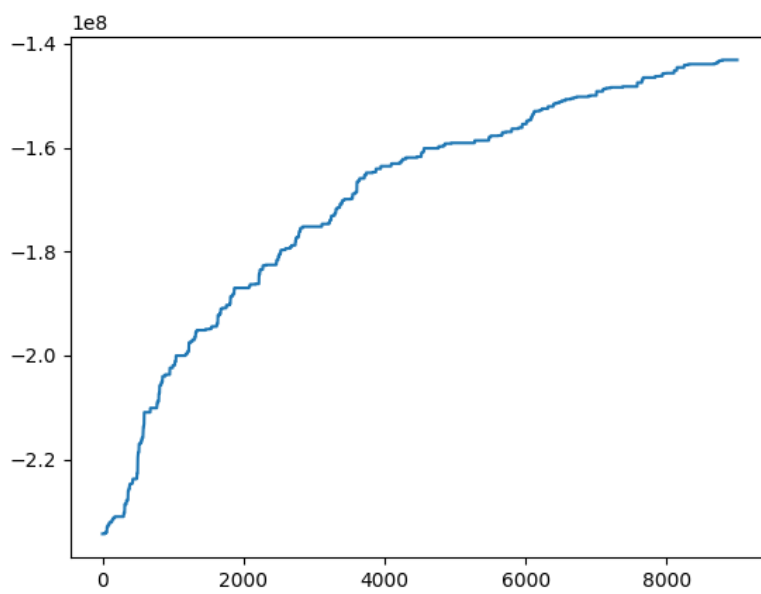
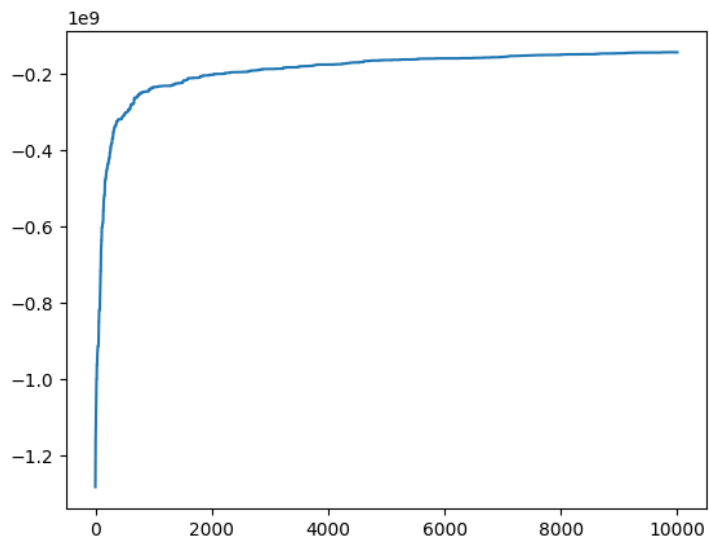


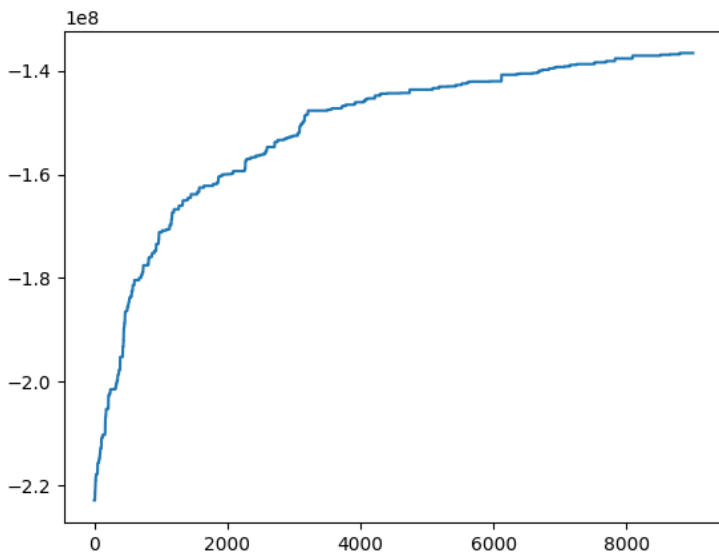
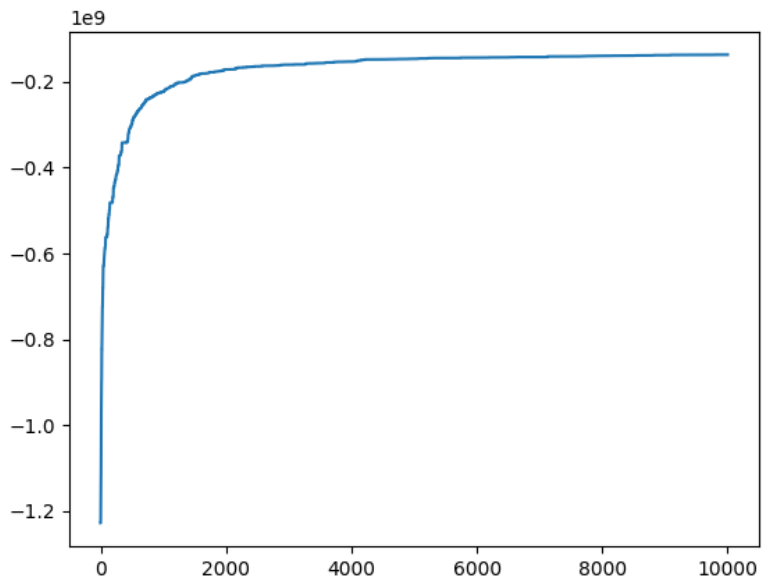
Figure 2: Generation 1000 to 10000

(Figures are arranged in the same order.)

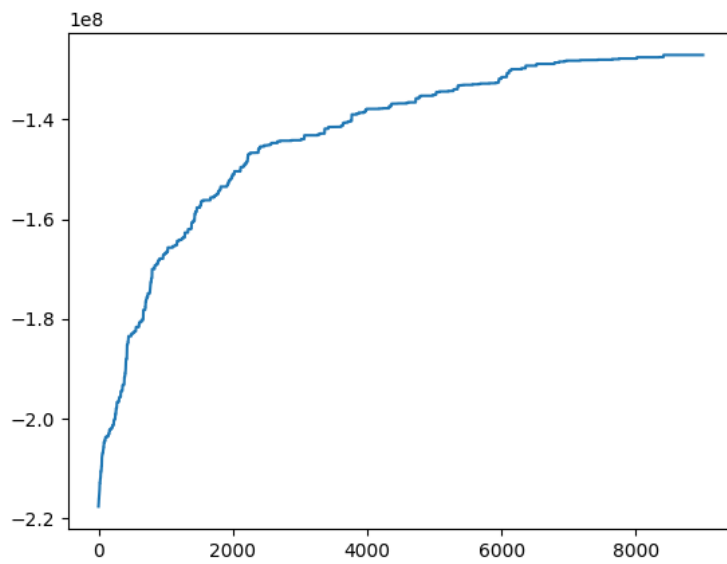
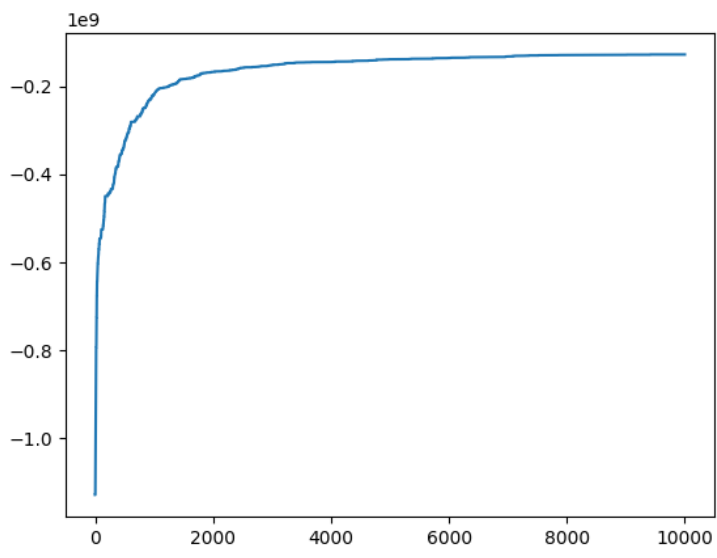
iii)20



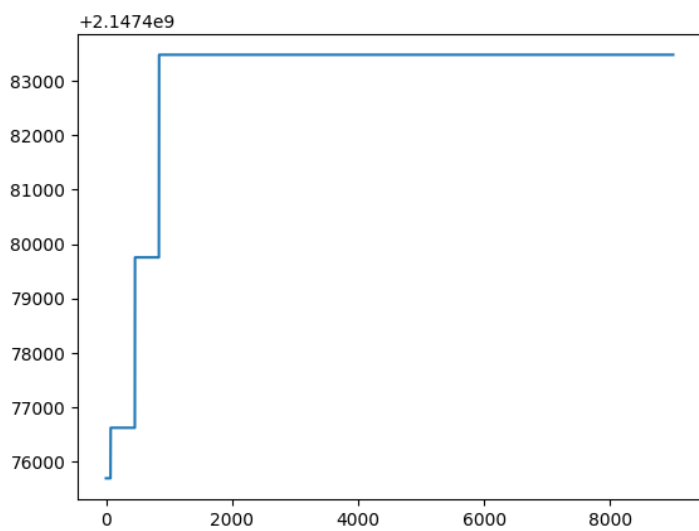
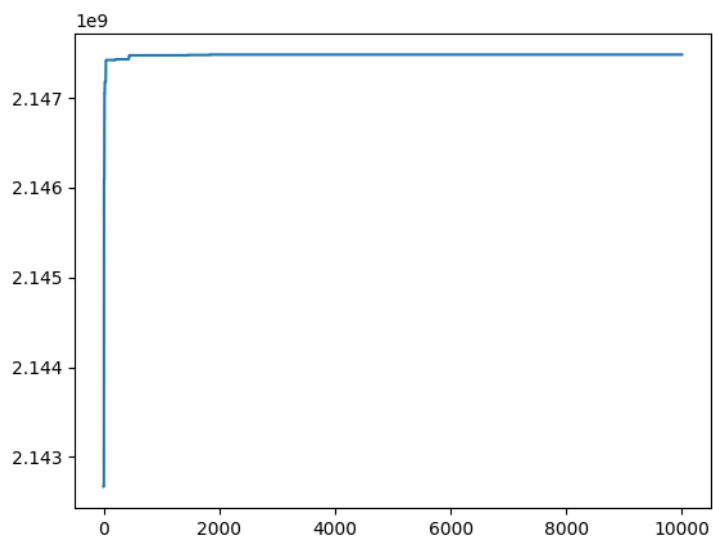
iv)40



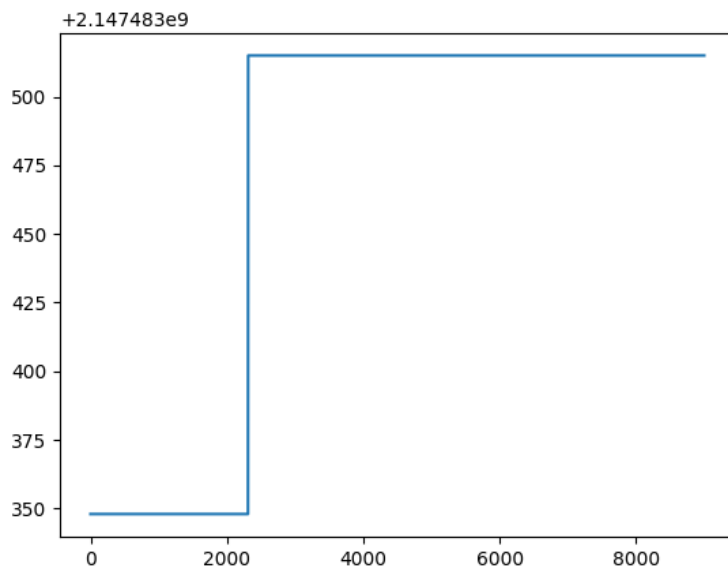
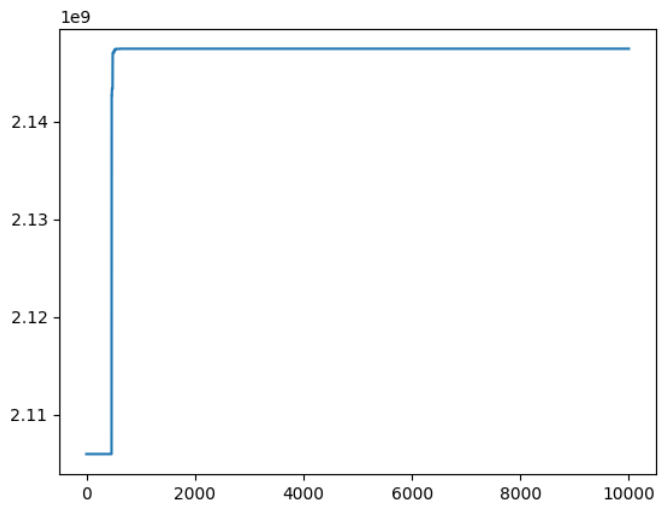
v)60



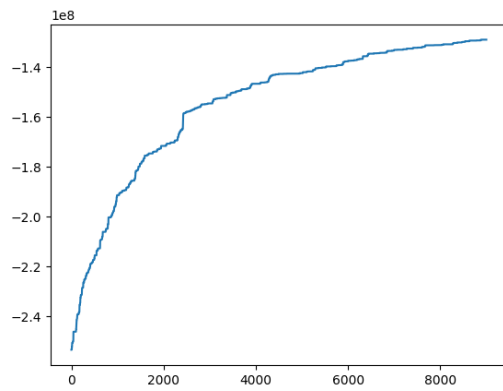
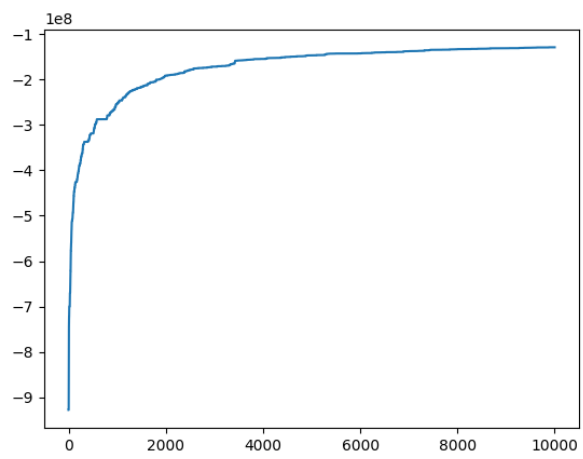
B)Num_genes



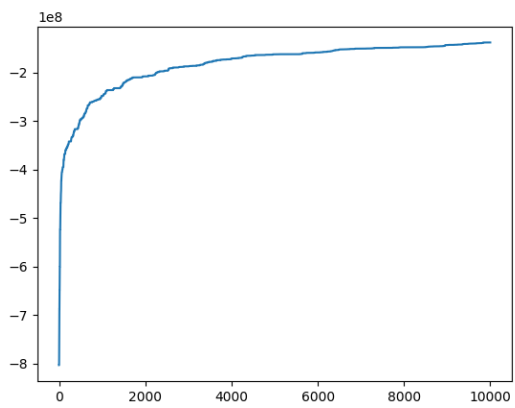
ii)30

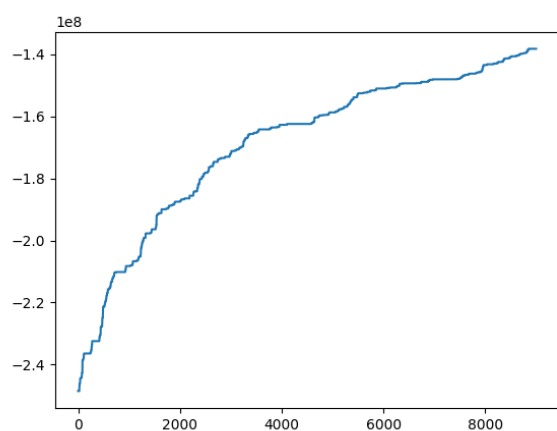


iii)80



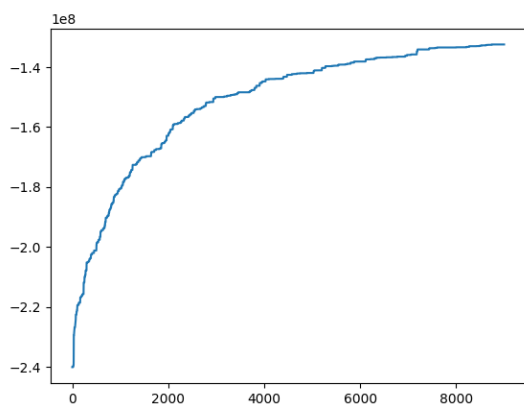
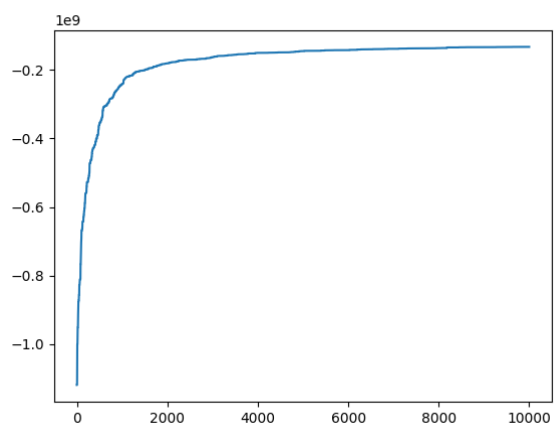
vi)120



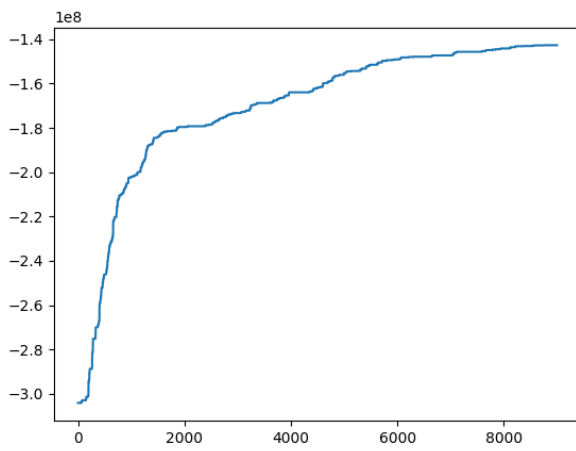
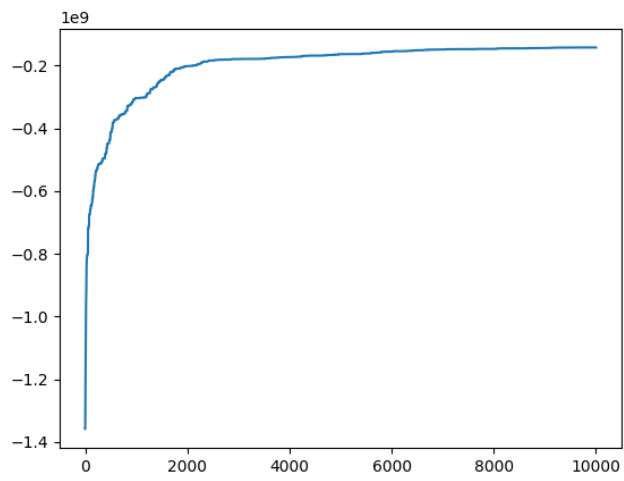


C)tm_size

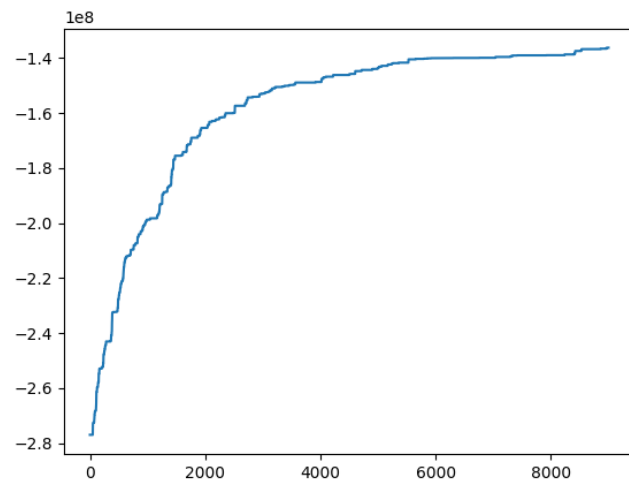
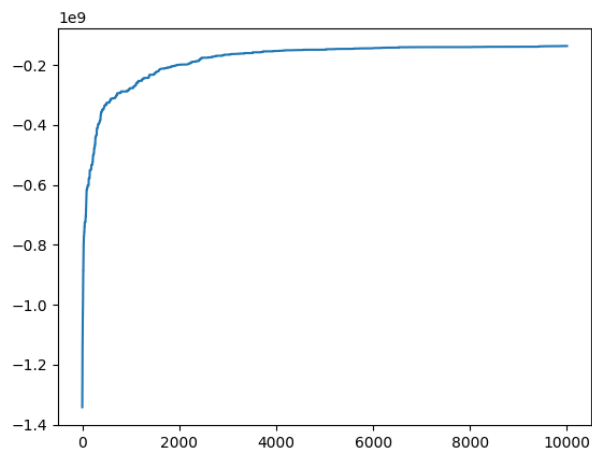
i)2



i)8



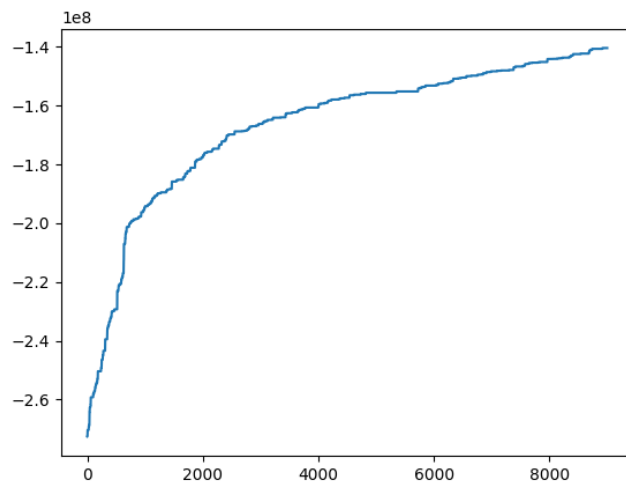
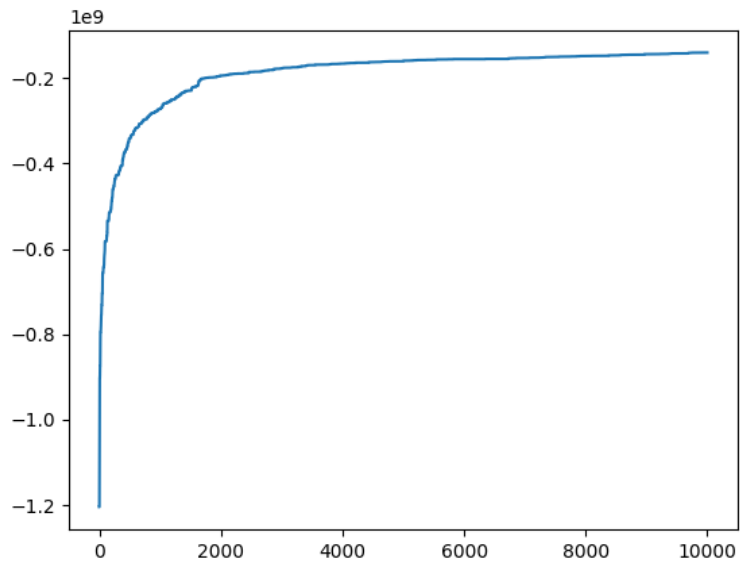
iii)16



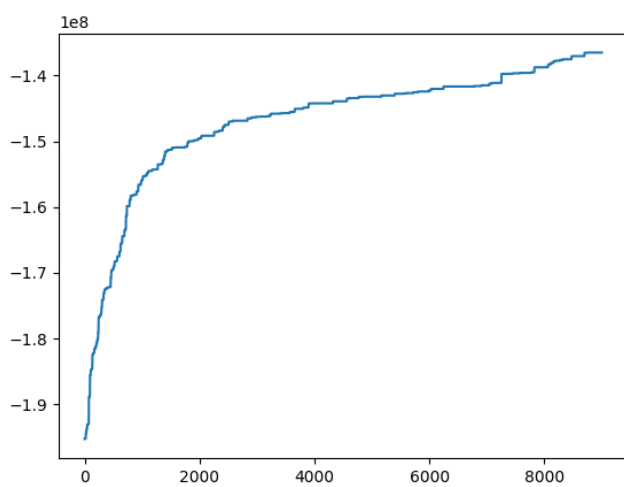
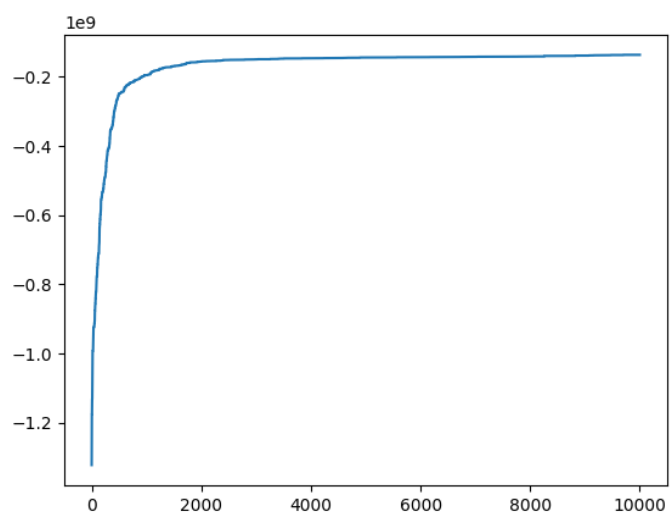
D)frac_elites

i)0.04

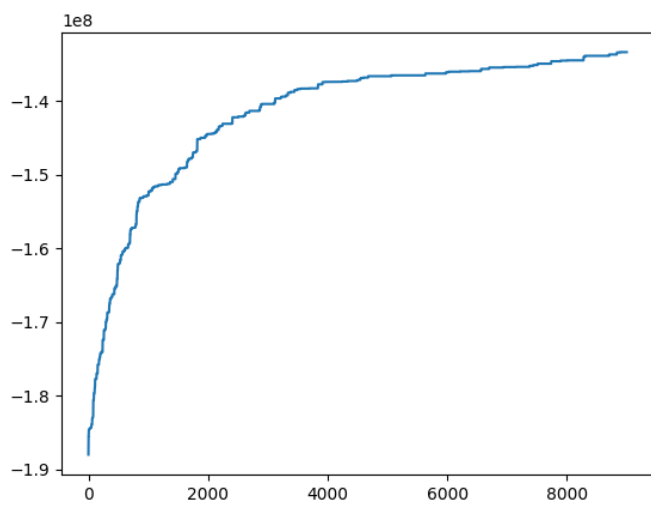
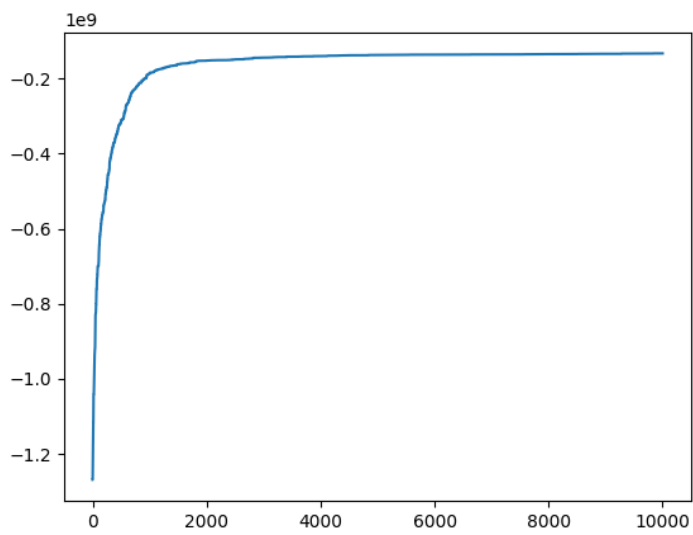
ii)0.35



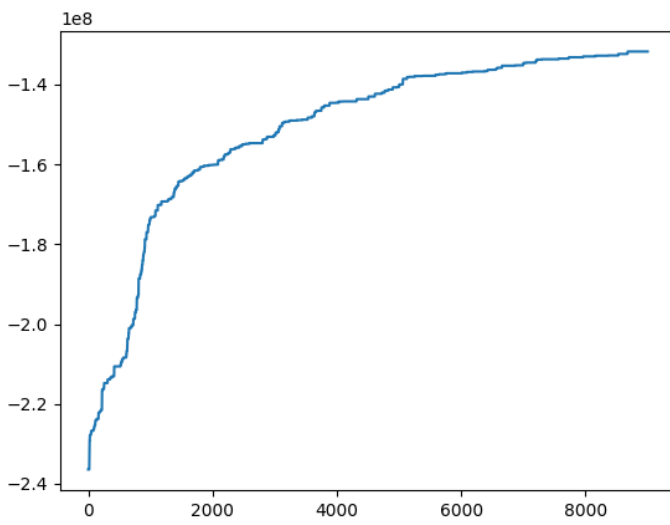
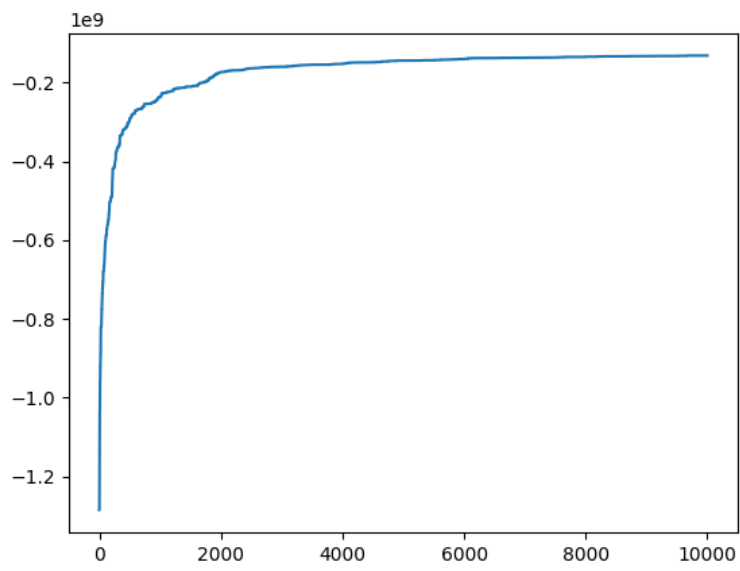
E)frac_parents



ii)0.15

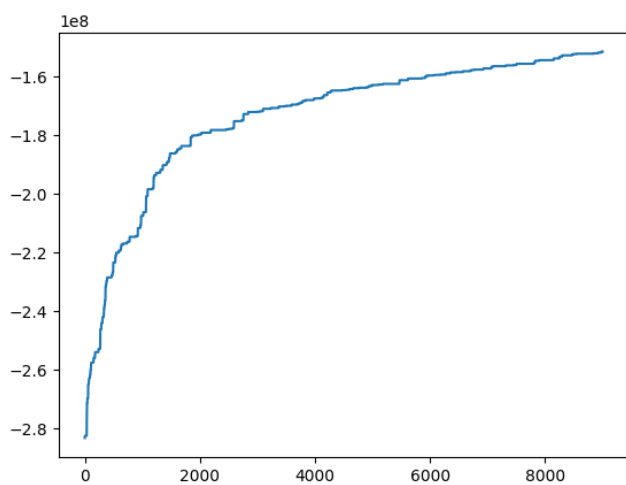
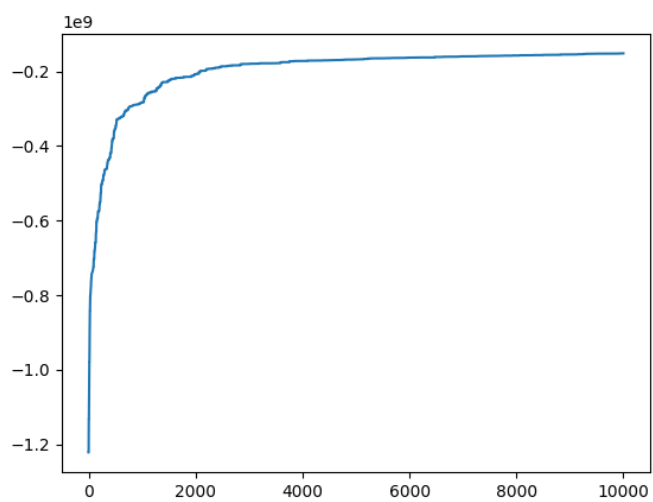


iii) 0.75

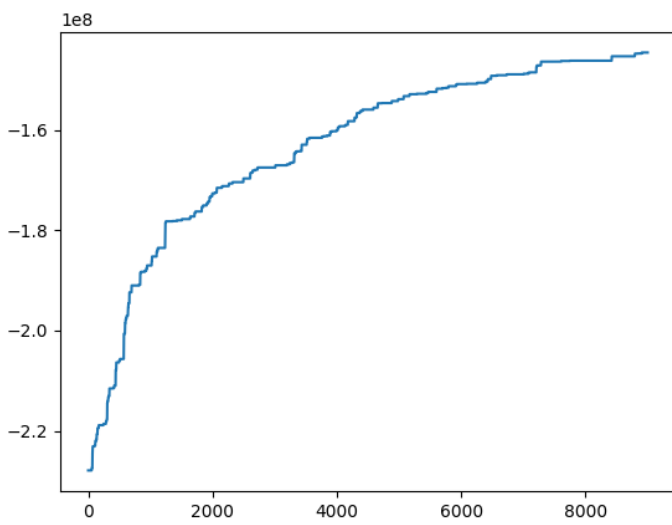
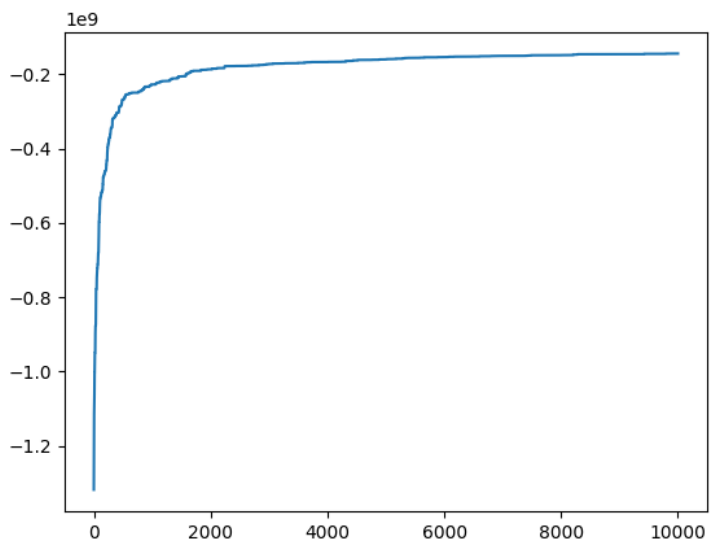


F)Mutation_prob

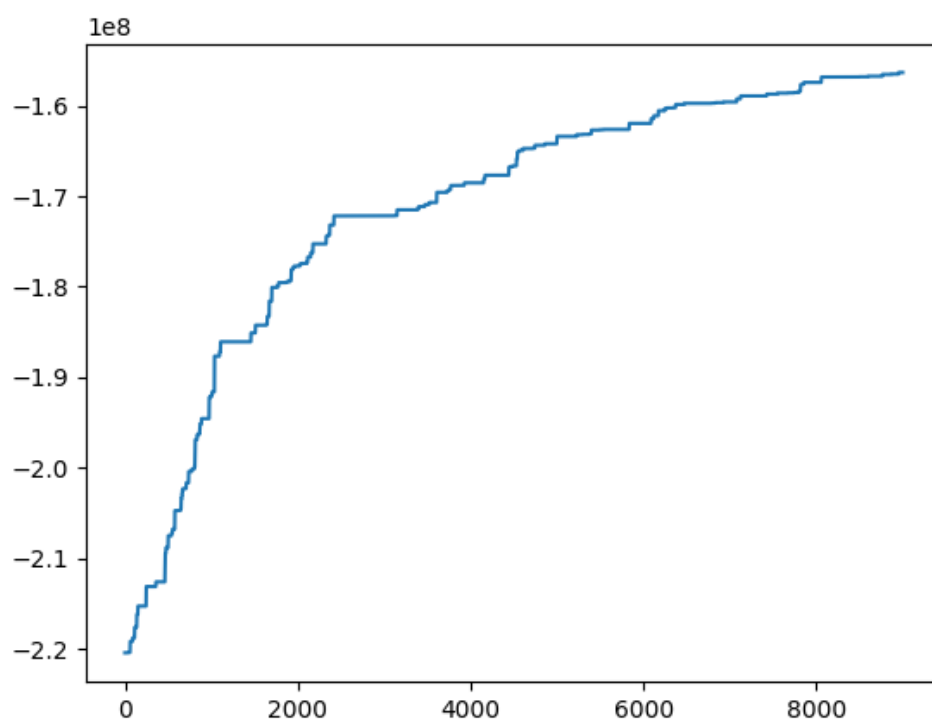
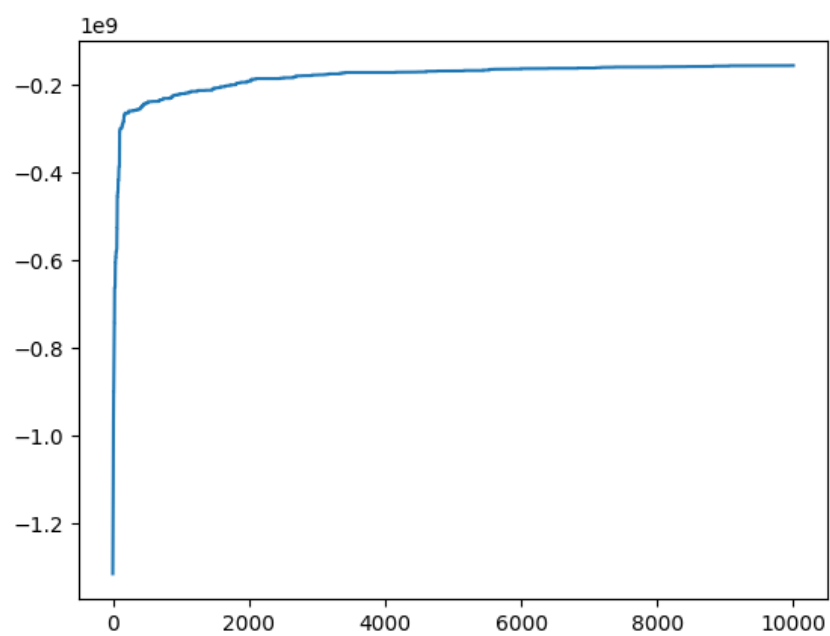
i)0.1



ii)0.4



iii)0.75



G) Mutation type

i) unguided

