

Image of program running

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75513/eduardo/Desktop/Fall 2021/CS101/Assignments/genetic.py
Generation 0, Best Fitness: 5.999999999999999
Generation 1, Best Fitness: 6.199999999999998
Generation 2, Best Fitness: 6.3
Generation 3, Best Fitness: 6.899999999999999
Generation 4, Best Fitness: 6.599999999999999
Generation 5, Best Fitness: 7.099999999999999
Generation 6, Best Fitness: 7.699999999999999
Generation 7, Best Fitness: 7.799999999999999
Generation 8, Best Fitness: 7.799999999999999
Generation 9, Best Fitness: 7.8999999999999995
Generation 10, Best Fitness: 8.2
Generation 11, Best Fitness: 8.2
Generation 12, Best Fitness: 8.399999999999999
Generation 13, Best Fitness: 8.2
Generation 14, Best Fitness: 8.399999999999999
Generation 15, Best Fitness: 8.499999999999998
Generation 16, Best Fitness: 8.399999999999999
Generation 17, Best Fitness: 8.499999999999998
Generation 18, Best Fitness: 8.499999999999998
Generation 19, Best Fitness: 8.499999999999998
Generation 20, Best Fitness: 8.499999999999998
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Generation 96, Best Fitness: 8.2
Generation 97, Best Fitness: 8.2
Generation 98, Best Fitness: 8.2
Generation 99, Best Fitness: 8.2
{'activity': 'SLA100A', 'room': 'Beach 201', 'time': '1 PM', 'facilitator': 'Glen'}
{'activity': 'SLA100B', 'room': 'Frank 119', 'time': '12 PM', 'facilitator': 'Lock'}
{'activity': 'SLA191A', 'room': 'Beach 301', 'time': '12 PM', 'facilitator': 'Lock'}
{'activity': 'SLA191B', 'room': 'Beach 301', 'time': '11 AM', 'facilitator': 'Glen'}
{'activity': 'SLA201', 'room': 'Beach 201', 'time': '12 PM', 'facilitator': 'Zeldin'}
{'activity': 'SLA291', 'room': 'Loft 206', 'time': '1 PM', 'facilitator': 'Singer'}
{'activity': 'SLA303', 'room': 'Beach 201', 'time': '2 PM', 'facilitator': 'Zeldin'}
{'activity': 'SLA304', 'room': 'Slater 003', 'time': '1 PM', 'facilitator': 'Glen'}
{'activity': 'SLA394', 'room': 'Roman 201', 'time': '12 PM', 'facilitator': 'Tyler'}
{'activity': 'SLA449', 'room': 'Beach 301', 'time': '10 AM', 'facilitator': 'Tyler'}
{'activity': 'SLA451', 'room': 'Roman 201', 'time': '2 PM', 'facilitator': 'Singer'}
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- What were the challenges in writing the program? Or did it seem to go smoothly from the beginning?
 - i like list comprehension and used it a few times. Not a good idea for readability it ended up running fairly slow because of all of the loops i was using and i was

calculating fitness over and over again when i shouldn't have to. I should have utilized dictionaries and referenced it so i don't have to recalculate certain values.

- What do you think of the schedule your program produced? Does it have anything that still looks odd or out of place?
 - Yes, the time i put into this i could have gotten a much better schedule doing it manually.
- How would you improve the program, or change the fitness function?
 - using dictionary to store values instead of recalculating them every time.
- Anything else you feel like discussing, asking about, bragging about, etc.
 - yeah my fitness function is really bad no where near 20+
 - i couldn't get it any higher what helped was messing with mutation sort of. It would go from 6 to 9 then it would plateau again at 6.