

We ran 3 inputs of sizes 2000,2000,3000 randomly distributed (3 attempts on each one).

First input (2000 jobs): 21 diff from perfect split

second input (2000 jobs): 18 diff from perfect split

third input (3000 jobs): 28 diff from perfect split

Number 1

"size=2000; sum=100607; avgJob=51; perfectSplit=20122"

Attempt 1 start

**Best gene got replaced in generation 2. Gene details: Gene id=50 TF=20328,
#Machines=5, content:Very long..., Summed Machines(20326,20328,19861,20059,20033)
**Best gene got replaced in generation 3. Gene details: Gene id=78 TF=20301,
#Machines=5, content:Very long..., Summed Machines(20301,20267,20298,19827,19914)
**Best gene got replaced in generation 4. Gene details: Gene id=3 TF=20242, #Machines=5,
content:Very long..., Summed Machines(20066,20137,20001,20161,20242)
**Best gene got replaced in generation 55. Gene details: Gene id=59 TF=20208,
#Machines=5, content:Very long..., Summed Machines(20181,20208,19969,20204,20045)
**Best gene got replaced in generation 59. Gene details: Gene id=90 TF=20198,
#Machines=5, content:Very long..., Summed Machines(20132,20036,20077,20198,20164)
**Best gene got replaced in generation 65. Gene details: Gene id=85 TF=20187,
#Machines=5, content:Very long..., Summed Machines(20088,20151,20037,20144,20187)
**Best gene got replaced in generation 70. Gene details: Gene id=29 TF=20181,
#Machines=5, content:Very long..., Summed Machines(20181,20007,20141,20100,20178)
**Best gene got replaced in generation 87. Gene details: Gene id=32 TF=20177,
#Machines=5, content:Very long..., Summed Machines(20066,20134,20177,20160,20070)
**Best gene got replaced in generation 93. Gene details: Gene id=88 TF=20169,
#Machines=5, content:Very long..., Summed Machines(20010,20100,20169,20167,20161)
**Best gene got replaced in generation 100. Gene details: Gene id=89 TF=20143,
#Machines=5, content:Very long..., Summed Machines(20090,20128,20111,20135,20143)
**END On Gen=100
**Best gene found: Gene id=89 TF=20143, #Machines=5, content:Very long..., Summed
Machines(20090,20128,20111,20135,20143)

Attempt 1: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.05;
mutationSize=0.05; TF=20143; DiffFromPerfectSplit=21

Attempt 2 start

**Best gene got replaced in generation 2. Gene details: Gene id=23 TF=20592,
#Machines=5, content:Very long..., Summed Machines(19944,20592,19537,20205,20329)
**Best gene got replaced in generation 2. Gene details: Gene id=37 TF=20540,
#Machines=5, content:Very long..., Summed Machines(20100,19714,19723,20530,20540)
**Best gene got replaced in generation 3. Gene details: Gene id=22 TF=20493,
#Machines=5, content:Very long..., Summed Machines(20225,20493,20104,20312,19473)

**Best gene got replaced in generation 4. Gene details: Gene id=14 TF=20428,
 #Machines=5, content:Very long..., Summed Machines(20155,20396,19954,19674,20428)
 **Best gene got replaced in generation 4. Gene details: Gene id=36 TF=20412,
 #Machines=5, content:Very long..., Summed Machines(20406,19778,20142,19869,20412)
 **Best gene got replaced in generation 5. Gene details: Gene id=3 TF=20363, #Machines=5,
 content:Very long..., Summed Machines(20344,19924,20363,20046,19930)
 **Best gene got replaced in generation 7. Gene details: Gene id=35 TF=20329,
 #Machines=5, content:Very long..., Summed Machines(20248,19950,19798,20282,20329)
 **Best gene got replaced in generation 18. Gene details: Gene id=22 TF=20278,
 #Machines=5, content:Very long..., Summed Machines(20004,20090,20201,20034,20278)
 **Best gene got replaced in generation 25. Gene details: Gene id=1 TF=20206,
 #Machines=5, content:Very long..., Summed Machines(20035,20097,20106,20163,20206)
 **Best gene got replaced in generation 35. Gene details: Gene id=9 TF=20198,
 #Machines=5, content:Very long..., Summed Machines(20176,20184,20085,20198,19964)
 **Best gene got replaced in generation 59. Gene details: Gene id=1 TF=20192,
 #Machines=5, content:Very long..., Summed Machines(20095,20192,20047,20143,20130)
 **Best gene got replaced in generation 60. Gene details: Gene id=2 TF=20181,
 #Machines=5, content:Very long..., Summed Machines(20136,20114,20181,20082,20094)
 **Best gene got replaced in generation 63. Gene details: Gene id=42 TF=20172,
 #Machines=5, content:Very long..., Summed Machines(20059,20152,20153,20172,20071)
 **Best gene got replaced in generation 66. Gene details: Gene id=21 TF=20166,
 #Machines=5, content:Very long..., Summed Machines(20158,20062,20082,20139,20166)
 **Best gene got replaced in generation 72. Gene details: Gene id=37 TF=20161,
 #Machines=5, content:Very long..., Summed Machines(20085,20161,20088,20157,20116)
 **END On Gen=72
 **Best gene found: Gene id=37 TF=20161, #Machines=5, content:Very long..., Summed
 Machines(20085,20161,20088,20157,20116)
 Attempt 2: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.05;
 mutationSize=0.05; TF=20161; DiffFromPerfectSplit=39

Attempt 3 start

**Best gene got replaced in generation 2. Gene details: Gene id=24 TF=20404,
 #Machines=5, content:Very long..., Summed Machines(20201,20404,19460,20399,20143)
 **Best gene got replaced in generation 2. Gene details: Gene id=35 TF=20380,
 #Machines=5, content:Very long..., Summed Machines(20380,20264,19627,20082,20254)
 **Best gene got replaced in generation 2. Gene details: Gene id=106 TF=20373,
 #Machines=5, content:Very long..., Summed Machines(19768,20071,20299,20373,20096)
 **Best gene got replaced in generation 2. Gene details: Gene id=169 TF=20350,
 #Machines=5, content:Very long..., Summed Machines(20328,20318,19520,20091,20350)
 **Best gene got replaced in generation 3. Gene details: Gene id=97 TF=20334,
 #Machines=5, content:Very long..., Summed Machines(20163,20204,20026,19880,20334)
 **Best gene got replaced in generation 4. Gene details: Gene id=8 TF=20232, #Machines=5,
 content:Very long..., Summed Machines(20224,19878,20229,20232,20044)
 **Best gene got replaced in generation 28. Gene details: Gene id=86 TF=20215,
 #Machines=5, content:Very long..., Summed Machines(20215,19966,20109,20166,20151)
 **Best gene got replaced in generation 29. Gene details: Gene id=147 TF=20207,
 #Machines=5, content:Very long..., Summed Machines(20137,20207,19883,20198,20182)
 **END On Gen=29

**Best gene found: Gene id=147 TF=20207, #Machines=5, content:Very long..., Summed Machines(20137,20207,19883,20198,20182)
Attempt 3: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.05; TF=20207; DiffFromPerfectSplit=85

"BestGene found on all attempts:Gene id=89 TF=20143, #Machines=5, content:Very long..., Summed Machines(20090,20128,20111,20135,20143)"
"Total time: 108.849 seconds"

Number 2

"size=2000; sum=101407; avgJob=51; perfectSplit=20282"

Attempt 1 start

**Best gene got replaced in generation 2. Gene details: Gene id=1 TF=20769, #Machines=5, content:Very long..., Summed Machines(20769,20717,20226,19426,20269)
**Best gene got replaced in generation 2. Gene details: Gene id=32 TF=20520, #Machines=5, content:Very long..., Summed Machines(20283,20054,20210,20520,20340)
**Best gene got replaced in generation 5. Gene details: Gene id=5 TF=20487, #Machines=5, content:Very long..., Summed Machines(20341,19979,20487,20470,20130)
**Best gene got replaced in generation 6. Gene details: Gene id=44 TF=20375, #Machines=5, content:Very long..., Summed Machines(20334,20280,20288,20130,20375)
**Best gene got replaced in generation 28. Gene details: Gene id=89 TF=20362, #Machines=5, content:Very long..., Summed Machines(20362,20161,20310,20304,20270)
**Best gene got replaced in generation 47. Gene details: Gene id=29 TF=20350, #Machines=5, content:Very long..., Summed Machines(20132,20266,20318,20350,20341)
**Best gene got replaced in generation 86. Gene details: Gene id=6 TF=20335, #Machines=5, content:Very long..., Summed Machines(20335,20162,20292,20316,20302)
**Best gene got replaced in generation 88. Gene details: Gene id=28 TF=20329, #Machines=5, content:Very long..., Summed Machines(20267,20186,20298,20329,20327)
**Best gene got replaced in generation 96. Gene details: Gene id=3 TF=20328, #Machines=5, content:Very long..., Summed Machines(20218,20278,20294,20289,20328)
**END On Gen=96
**Best gene found: Gene id=3 TF=20328, #Machines=5, content:Very long..., Summed Machines(20218,20278,20294,20289,20328)
Attempt 1: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.05; TF=20328; DiffFromPerfectSplit=46

Attempt 2 start

**Best gene got replaced in generation 5. Gene details: Gene id=34 TF=20552, #Machines=5, content:Very long..., Summed Machines(20050,19781,20507,20517,20552)
**Best gene got replaced in generation 7. Gene details: Gene id=34 TF=20540, #Machines=5, content:Very long..., Summed Machines(19718,20539,20167,20443,20540)
**Best gene got replaced in generation 13. Gene details: Gene id=8 TF=20491, #Machines=5, content:Very long..., Summed Machines(20428,20491,20137,20224,20127)
**Best gene got replaced in generation 13. Gene details: Gene id=16 TF=20477, #Machines=5, content:Very long..., Summed Machines(20358,20477,20400,19955,20217)
**Best gene got replaced in generation 14. Gene details: Gene id=13 TF=20473, #Machines=5, content:Very long..., Summed Machines(20291,20473,20424,19932,20287)

**Best gene got replaced in generation 14. Gene details: Gene id=15 TF=20437,
#Machines=5, content:Very long..., Summed Machines(20437,20355,19904,20321,20390)
**Best gene got replaced in generation 24. Gene details: Gene id=1 TF=20394,
#Machines=5, content:Very long..., Summed Machines(20278,20115,20351,20269,20394)
**Best gene got replaced in generation 32. Gene details: Gene id=23 TF=20386,
#Machines=5, content:Very long..., Summed Machines(20269,20335,20386,20052,20365)
**Best gene got replaced in generation 44. Gene details: Gene id=11 TF=20363,
#Machines=5, content:Very long..., Summed Machines(20289,20321,20301,20133,20363)
**Best gene got replaced in generation 51. Gene details: Gene id=14 TF=20353,
#Machines=5, content:Very long..., Summed Machines(20155,20329,20353,20250,20320)
**Best gene got replaced in generation 53. Gene details: Gene id=35 TF=20339,
#Machines=5, content:Very long..., Summed Machines(20242,20339,20303,20244,20279)
**Best gene got replaced in generation 55. Gene details: Gene id=39 TF=20321,
#Machines=5, content:Very long..., Summed Machines(20274,20280,20311,20221,20321)
**Best gene got replaced in generation 64. Gene details: Gene id=37 TF=20306,
#Machines=5, content:Very long..., Summed Machines(20263,20273,20306,20302,20263)
**Best gene got replaced in generation 66. Gene details: Gene id=37 TF=20300,
#Machines=5, content:Very long..., Summed Machines(20300,20283,20274,20265,20285)
**END On Gen=66
**Best gene found: Gene id=37 TF=20300, #Machines=5, content:Very long..., Summed
Machines(20300,20283,20274,20265,20285)
Attempt 2: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.05;
mutationSize=0.05; TF=20300; DiffFromPerfectSplit=18

Attempt 3 start

**Best gene got replaced in generation 9. Gene details: Gene id=23 TF=20331,
#Machines=5, content:Very long..., Summed Machines(20331,20326,20273,20217,20260)
**END On Gen=9
**Best gene found: Gene id=23 TF=20331, #Machines=5, content:Very long..., Summed
Machines(20331,20326,20273,20217,20260)
Attempt 3: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.05;
mutationSize=0.05; TF=20331; DiffFromPerfectSplit=49

"BestGene found on all attempts:Gene id=37 TF=20300, #Machines=5, content:Very long...,
Summed Machines(20300,20283,20274,20265,20285)"

"Total time: 107.723 seconds"

Number 3

"size=3000; sum=152830; avgJob=51; perfectSplit=30566"

Attempt 1 start

**Best gene got replaced in generation 3. Gene details: Gene id=0 TF=31042, #Machines=5,
content:Very long..., Summed Machines(30602,30954,30807,29425,31042)
**Best gene got replaced in generation 3. Gene details: Gene id=20 TF=30898,
#Machines=5, content:Very long..., Summed Machines(30898,30763,30788,29963,30418)
**Best gene got replaced in generation 3. Gene details: Gene id=77 TF=30839,
#Machines=5, content:Very long..., Summed Machines(30204,30218,30770,30799,30839)

**Best gene got replaced in generation 9. Gene details: Gene id=7 TF=30789, #Machines=5, content:Very long..., Summed Machines(30789,30579,30573,30284,30605)
**Best gene got replaced in generation 14. Gene details: Gene id=8 TF=30764, #Machines=5, content:Very long..., Summed Machines(30574,30764,30634,30268,30590)
**Best gene got replaced in generation 22. Gene details: Gene id=78 TF=30740, #Machines=5, content:Very long..., Summed Machines(30740,30329,30523,30514,30724)
**Best gene got replaced in generation 33. Gene details: Gene id=42 TF=30689, #Machines=5, content:Very long..., Summed Machines(30631,30416,30629,30689,30465)
**Best gene got replaced in generation 38. Gene details: Gene id=63 TF=30659, #Machines=5, content:Very long..., Summed Machines(30659,30464,30607,30482,30618)
**Best gene got replaced in generation 95. Gene details: Gene id=27 TF=30657, #Machines=5, content:Very long..., Summed Machines(30607,30563,30652,30351,30657)
**Best gene got replaced in generation 96. Gene details: Gene id=38 TF=30594, #Machines=5, content:Very long..., Summed Machines(30585,30553,30590,30508,30594)
**END On Gen=96
**Best gene found: Gene id=38 TF=30594, #Machines=5, content:Very long..., Summed Machines(30585,30553,30590,30508,30594)
Attempt 1: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.05; TF=30594; DiffFromPerfectSplit=28

Attempt 2 start

**Best gene got replaced in generation 2. Gene details: Gene id=22 TF=31130, #Machines=5, content:Very long..., Summed Machines(31130,30957,30794,29639,30310)
**Best gene got replaced in generation 2. Gene details: Gene id=41 TF=31095, #Machines=5, content:Very long..., Summed Machines(31095,30467,30148,30319,30801)
**Best gene got replaced in generation 5. Gene details: Gene id=1 TF=30794, #Machines=5, content:Very long..., Summed Machines(30451,30227,30739,30619,30794)
**Best gene got replaced in generation 10. Gene details: Gene id=6 TF=30780, #Machines=5, content:Very long..., Summed Machines(30232,30607,30740,30780,30471)
**Best gene got replaced in generation 17. Gene details: Gene id=38 TF=30754, #Machines=5, content:Very long..., Summed Machines(30650,30705,30562,30754,30159)
**Best gene got replaced in generation 23. Gene details: Gene id=12 TF=30701, #Machines=5, content:Very long..., Summed Machines(30699,30701,30423,30620,30387)
**Best gene got replaced in generation 36. Gene details: Gene id=40 TF=30660, #Machines=5, content:Very long..., Summed Machines(30485,30533,30492,30660,30660)
**Best gene got replaced in generation 46. Gene details: Gene id=12 TF=30654, #Machines=5, content:Very long..., Summed Machines(30416,30654,30603,30532,30625)
**Best gene got replaced in generation 47. Gene details: Gene id=7 TF=30645, #Machines=5, content:Very long..., Summed Machines(30645,30585,30534,30464,30602)
**Best gene got replaced in generation 49. Gene details: Gene id=35 TF=30630, #Machines=5, content:Very long..., Summed Machines(30422,30608,30630,30600,30570)
**END On Gen=49
**Best gene found: Gene id=35 TF=30630, #Machines=5, content:Very long..., Summed Machines(30422,30608,30630,30600,30570)
Attempt 2: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.05; TF=30630; DiffFromPerfectSplit=64

Attempt 3 start

**Best gene got replaced in generation 2. Gene details: Gene id=38 TF=31059,
#Machines=5, content:Very long..., Summed Machines(30257,30641,30133,30740,31059)
**Best gene got replaced in generation 2. Gene details: Gene id=63 TF=31016,
#Machines=5, content:Very long..., Summed Machines(30896,31016,30891,29883,30144)
**Best gene got replaced in generation 2. Gene details: Gene id=90 TF=30947,
#Machines=5, content:Very long..., Summed Machines(30531,30789,30397,30947,30166)
**Best gene got replaced in generation 5. Gene details: Gene id=13 TF=30885,
#Machines=5, content:Very long..., Summed Machines(30282,30639,30315,30885,30709)
**Best gene got replaced in generation 6. Gene details: Gene id=126 TF=30774,
#Machines=5, content:Very long..., Summed Machines(30589,30270,30555,30642,30774)
**Best gene got replaced in generation 11. Gene details: Gene id=138 TF=30755,
#Machines=5, content:Very long..., Summed Machines(30692,30486,30697,30755,30200)
**Best gene got replaced in generation 26. Gene details: Gene id=69 TF=30717,
#Machines=5, content:Very long..., Summed Machines(30544,30603,30717,30558,30408)
**Best gene got replaced in generation 28. Gene details: Gene id=52 TF=30698,
#Machines=5, content:Very long..., Summed Machines(30289,30698,30559,30673,30611)
**Best gene got replaced in generation 35. Gene details: Gene id=179 TF=30686,
#Machines=5, content:Very long..., Summed Machines(30544,30686,30459,30489,30652)
**Best gene got replaced in generation 45. Gene details: Gene id=35 TF=30685,
#Machines=5, content:Very long..., Summed Machines(30661,30685,30642,30221,30621)
**Best gene got replaced in generation 49. Gene details: Gene id=57 TF=30637,
#Machines=5, content:Very long..., Summed Machines(30591,30563,30506,30533,30637)
**END On Gen=49

**Best gene found: Gene id=57 TF=30637, #Machines=5, content:Very long..., Summed
Machines(30591,30563,30506,30533,30637)
Attempt 3: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.05;
mutationSize=0.05; TF=30637; DiffFromPerfectSplit=71

"BestGene found on all attempts:Gene id=38 TF=30594, #Machines=5, content:Very long...,
Summed Machines(30585,30553,30590,30508,30594)"
"Total time: 132.362 seconds"