We did benchmarking as agreed on our last appointment

This are the parameters:

- Population size(popSize) ∈ $\{50,100,200\}$
- Number of generations = $\frac{10000}{\text{popSize}}$
- Fitness function:
  1. diffFromU(our original fitness function) = $\frac{U-xi}{\sum_{j=1}^{\text{popSize}} U-xj}$

     where U=maximal target function value in the Generation and xi is the target function of the current Gene.
  2. 3ps = $\frac{3ps-xi}{\sum_{j=1}^{\text{popSize}} 3ps-xj}$ where ps=$\frac{\sum jobi}{numOfMachines}$ and 3 is just a constant
  3. 1/tf := $\frac{1/tfi}{\sum_{j=1}^{\text{popSize}} 1/tfj}$
  4. 1/root(tf) := $\frac{1/\sqrt{tfi}}{\sum_{j=1}^{\text{popSize}} 1/\sqrt{tfj}}$
  5. 1/tf ^{2}:= $\frac{1/tfi^2}{\sum_{j=1}^{\text{popSize}} 1/tfj^2}$
- Number of Genes to mutate in a generation (mutationPercet) ∈ $\{0.01, 0.03, 0.05\}$
- The size of a mutation(mutationSize) ∈ $\{0.01, 0.03, 0.05\}$

Total numbers of runs **<u>per 1 input</u>**: 3*5*3*3 = 135 runs
Where each run take ~25seconds => 0.93 hours

We took the following example:

- Machines number = 5
- Jobs number = 1000
- Tf from benchmark = 9990
- Average job value = 49.947

Best result:
8: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.05; TF=9996; benchMarkTf-ourTf=6

So now we will take these parameters and run 3 inputs of sizes 2000,2000,3000 and create report number 3

Here are the results:

Starting C:\algo\build-h-Desktop_Qt_5_6_0_MinGW_32bit-Debug\debug\h.exe...
*Data: machinesNum=5 jobsNum=1000 BenchMarkTf=9990
*Content of machines summed (9990, 9990, 9989, 9989, 9989)
input selected: size 1000 sum 49947
0: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.01; mutationSize=0.01; TF=10011; benchMarkTf-ourTf=21

1: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.01; mutationSize=0.03; TF=10006; benchMarkTf-ourTf=16

2: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.01; mutationSize=0.05; TF=10009; benchMarkTf-ourTf=19

3: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.03; mutationSize=0.01; TF=10005; benchMarkTf-ourTf=15

4: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.03; mutationSize=0.03; TF=9998; benchMarkTf-ourTf=8

5: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.03; mutationSize=0.05; TF=10007; benchMarkTf-ourTf=17

6: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.01; TF=10006; benchMarkTf-ourTf=16

7: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.03; TF=10006; benchMarkTf-ourTf=16

8: popSize=100; gensNum=100; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.05; TF=9996; benchMarkTf-ourTf=6

9: popSize=100; gensNum=100; fintnessVersion=3ps; mutationPercet=0.01; mutationSize=0.01; TF=10037; benchMarkTf-ourTf=47

10: popSize=100; gensNum=100; fintnessVersion=3ps; mutationPercet=0.01; mutationSize=0.03; TF=10033; benchMarkTf-ourTf=43

11: popSize=100; gensNum=100; fintnessVersion=3ps; mutationPercet=0.01; mutationSize=0.05; TF=10048; benchMarkTf-ourTf=58

12: popSize=100; gensNum=100; fintnessVersion=3ps; mutationPercet=0.03; mutationSize=0.01; TF=10059; benchMarkTf-ourTf=69

13: popSize=100; gensNum=100; fintnessVersion=3ps; mutationPercet=0.03; mutationSize=0.03; TF=10029; benchMarkTf-ourTf=39

14: popSize=100; gensNum=100; fintnessVersion=3ps; mutationPercet=0.03; mutationSize=0.05; TF=10057; benchMarkTf-ourTf=67

15: popSize=100; gensNum=100; fintnessVersion=3ps; mutationPercet=0.05; mutationSize=0.01; TF=10043; benchMarkTf-ourTf=53

16: popSize=100; gensNum=100; fintnessVersion=3ps; mutationPercet=0.05; mutationSize=0.03; TF=10037; benchMarkTf-ourTf=47

17: popSize=100; gensNum=100; fintnessVersion=3ps; mutationPercet=0.05; mutationSize=0.05; TF=10116; benchMarkTf-ourTf=126

18: popSize=100; gensNum=100; fintnessVersion=1/tf; mutationPercet=0.01; mutationSize=0.01; TF=10042; benchMarkTf-ourTf=52

19: popSize=100; gensNum=100; fintnessVersion=1/tf; mutationPercet=0.01; mutationSize=0.03; TF=10106; benchMarkTf-ourTf=116

20: popSize=100; gensNum=100; fintnessVersion=1/tf; mutationPercet=0.01; mutationSize=0.05; TF=10068; benchMarkTf-ourTf=78

21: popSize=100; gensNum=100; fintnessVersion=1/tf; mutationPercet=0.03; mutationSize=0.01; TF=10053; benchMarkTf-ourTf=63

22: popSize=100; gensNum=100; fintnessVersion=1/tf; mutationPercet=0.03; mutationSize=0.03; TF=10035; benchMarkTf-ourTf=45

23: popSize=100; gensNum=100; fintnessVersion=1/tf; mutationPercet=0.03; mutationSize=0.05; TF=10060; benchMarkTf-ourTf=70

24: popSize=100; gensNum=100; fintnessVersion=1/tf; mutationPercet=0.05; mutationSize=0.01; TF=10057; benchMarkTf-ourTf=67

25: popSize=100; gensNum=100; fintnessVersion=1/tf; mutationPercet=0.05; mutationSize=0.03; TF=10047; benchMarkTf-ourTf=57

26: popSize=100; gensNum=100; fintnessVersion=1/tf; mutationPercet=0.05; mutationSize=0.05; TF=10049; benchMarkTf-ourTf=59

27: popSize=100; gensNum=100; fintnessVersion=1/root(tf); mutationPercet=0.01; mutationSize=0.01; TF=10037; benchMarkTf-ourTf=47

28: popSize=100; gensNum=100; fintnessVersion=1/root(tf); mutationPercet=0.01; mutationSize=0.03; TF=10052; benchMarkTf-ourTf=62

29: popSize=100; gensNum=100; fintnessVersion=1/root(tf); mutationPercet=0.01; mutationSize=0.05; TF=10043; benchMarkTf-ourTf=53

30: popSize=100; gensNum=100; fintnessVersion=1/root(tf); mutationPercet=0.03; mutationSize=0.01; TF=10043; benchMarkTf-ourTf=53

31: popSize=100; gensNum=100; fintnessVersion=1/root(tf); mutationPercet=0.03; mutationSize=0.03; TF=10045; benchMarkTf-ourTf=55

32: popSize=100; gensNum=100; fintnessVersion=1/root(tf); mutationPercet=0.03; mutationSize=0.05; TF=10077; benchMarkTf-ourTf=87

33: popSize=100; gensNum=100; fintnessVersion=1/root(tf); mutationPercet=0.05; mutationSize=0.01; TF=10043; benchMarkTf-ourTf=53

34: popSize=100; gensNum=100; fintnessVersion=1/root(tf); mutationPercet=0.05; mutationSize=0.03; TF=10058; benchMarkTf-ourTf=68

35: popSize=100; gensNum=100; fintnessVersion=1/root(tf); mutationPercet=0.05; mutationSize=0.05; TF=10063; benchMarkTf-ourTf=73

36: popSize=100; gensNum=100; fintnessVersion=1/tf^2; mutationPercet=0.01; mutationSize=0.01; TF=10100; benchMarkTf-ourTf=110

37: popSize=100; gensNum=100; fintnessVersion=1/tf^2; mutationPercet=0.01; mutationSize=0.03; TF=10045; benchMarkTf-ourTf=55

38: popSize=100; gensNum=100; fintnessVersion=1/tf^2; mutationPercet=0.01; mutationSize=0.05; TF=10040; benchMarkTf-ourTf=50

39: popSize=100; gensNum=100; fintnessVersion=1/tf^2; mutationPercet=0.03; mutationSize=0.01; TF=10046; benchMarkTf-ourTf=56

40: popSize=100; gensNum=100; fintnessVersion=1/tf^2; mutationPercet=0.03; mutationSize=0.03; TF=10042; benchMarkTf-ourTf=52

41: popSize=100; gensNum=100; fintnessVersion=1/tf^2; mutationPercet=0.03; mutationSize=0.05; TF=10056; benchMarkTf-ourTf=66

42: popSize=100; gensNum=100; fintnessVersion=1/tf^2; mutationPercet=0.05; mutationSize=0.01; TF=10029; benchMarkTf-ourTf=39

43: popSize=100; gensNum=100; fintnessVersion=1/tf^2; mutationPercet=0.05; mutationSize=0.03; TF=10037; benchMarkTf-ourTf=47

44: popSize=100; gensNum=100; fintnessVersion=1/tf^2; mutationPercet=0.05; mutationSize=0.05; TF=10055; benchMarkTf-ourTf=65

45: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.01; mutationSize=0.01; TF=10004; benchMarkTf-ourTf=14

46: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.01; mutationSize=0.03; TF=9998; benchMarkTf-ourTf=8

47: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.01; mutationSize=0.05; TF=10000; benchMarkTf-ourTf=10

48: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.03; mutationSize=0.01; TF=10023; benchMarkTf-ourTf=33

49: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.03; mutationSize=0.03; TF=10022; benchMarkTf-ourTf=32

50: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.03; mutationSize=0.05; TF=10003; benchMarkTf-ourTf=13

51: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.01; TF=10017; benchMarkTf-ourTf=27

52: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.03; TF=10002; benchMarkTf-ourTf=12

53: popSize=50; gensNum=200; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.05; TF=10008; benchMarkTf-ourTf=18

54: popSize=50; gensNum=200; fintnessVersion=3ps; mutationPercet=0.01; mutationSize=0.01; TF=10132; benchMarkTf-ourTf=142

55: popSize=50; gensNum=200; fintnessVersion=3ps; mutationPercet=0.01; mutationSize=0.03; TF=10095; benchMarkTf-ourTf=105

56: popSize=50; gensNum=200; fintnessVersion=3ps; mutationPercet=0.01; mutationSize=0.05; TF=10077; benchMarkTf-ourTf=87

57: popSize=50; gensNum=200; fintnessVersion=3ps; mutationPercet=0.03; mutationSize=0.01; TF=10038; benchMarkTf-ourTf=48

58: popSize=50; gensNum=200; fintnessVersion=3ps; mutationPercet=0.03; mutationSize=0.03; TF=10018; benchMarkTf-ourTf=28

59: popSize=50; gensNum=200; fintnessVersion=3ps; mutationPercet=0.03; mutationSize=0.05; TF=10077; benchMarkTf-ourTf=87

60: popSize=50; gensNum=200; fintnessVersion=3ps; mutationPercet=0.05; mutationSize=0.01; TF=10097; benchMarkTf-ourTf=107

61: popSize=50; gensNum=200; fintnessVersion=3ps; mutationPercet=0.05; mutationSize=0.03; TF=10057; benchMarkTf-ourTf=67

62: popSize=50; gensNum=200; fintnessVersion=3ps; mutationPercet=0.05; mutationSize=0.05; TF=10051; benchMarkTf-ourTf=61

63: popSize=50; gensNum=200; fintnessVersion=1/tf; mutationPercet=0.01; mutationSize=0.01; TF=10057; benchMarkTf-ourTf=67

64: popSize=50; gensNum=200; fintnessVersion=1/tf; mutationPercet=0.01; mutationSize=0.03; TF=10057; benchMarkTf-ourTf=67

65: popSize=50; gensNum=200; fintnessVersion=1/tf; mutationPercet=0.01; mutationSize=0.05; TF=10066; benchMarkTf-ourTf=76

66: popSize=50; gensNum=200; fintnessVersion=1/tf; mutationPercet=0.03; mutationSize=0.01; TF=10040; benchMarkTf-ourTf=50

67: popSize=50; gensNum=200; fintnessVersion=1/tf; mutationPercet=0.03; mutationSize=0.03; TF=10025; benchMarkTf-ourTf=35

68: popSize=50; gensNum=200; fintnessVersion=1/tf; mutationPercet=0.03; mutationSize=0.05; TF=10066; benchMarkTf-ourTf=76

69: popSize=50; gensNum=200; fintnessVersion=1/tf; mutationPercet=0.05; mutationSize=0.01; TF=10060; benchMarkTf-ourTf=70

70: popSize=50; gensNum=200; fintnessVersion=1/tf; mutationPercet=0.05; mutationSize=0.03; TF=10075; benchMarkTf-ourTf=85

71: popSize=50; gensNum=200; fintnessVersion=1/tf; mutationPercet=0.05; mutationSize=0.05; TF=10056; benchMarkTf-ourTf=66

72: popSize=50; gensNum=200; fintnessVersion=1/root(tf); mutationPercet=0.01; mutationSize=0.01; TF=10063; benchMarkTf-ourTf=73

73: popSize=50; gensNum=200; fintnessVersion=1/root(tf); mutationPercet=0.01; mutationSize=0.03; TF=10045; benchMarkTf-ourTf=55

74: popSize=50; gensNum=200; fintnessVersion=1/root(tf); mutationPercet=0.01; mutationSize=0.05; TF=10039; benchMarkTf-ourTf=49

75: popSize=50; gensNum=200; fintnessVersion=1/root(tf); mutationPercet=0.03; mutationSize=0.01; TF=10091; benchMarkTf-ourTf=101

76: popSize=50; gensNum=200; fintnessVersion=1/root(tf); mutationPercet=0.03; mutationSize=0.03; TF=10117; benchMarkTf-ourTf=127

77: popSize=50; gensNum=200; fintnessVersion=1/root(tf); mutationPercet=0.03; mutationSize=0.05; TF=10098; benchMarkTf-ourTf=108

78: popSize=50; gensNum=200; fintnessVersion=1/root(tf); mutationPercet=0.05; mutationSize=0.01; TF=10025; benchMarkTf-ourTf=35

79: popSize=50; gensNum=200; fintnessVersion=1/root(tf); mutationPercet=0.05; mutationSize=0.03; TF=10075; benchMarkTf-ourTf=85

80: popSize=50; gensNum=200; fintnessVersion=1/root(tf); mutationPercet=0.05; mutationSize=0.05; TF=10160; benchMarkTf-ourTf=170

81: popSize=50; gensNum=200; fintnessVersion=1/tf^2; mutationPercet=0.01; mutationSize=0.01; TF=10068; benchMarkTf-ourTf=78

82: popSize=50; gensNum=200; fintnessVersion=1/tf^2; mutationPercet=0.01; mutationSize=0.03; TF=10068; benchMarkTf-ourTf=78

83: popSize=50; gensNum=200; fintnessVersion=1/tf^2; mutationPercet=0.01; mutationSize=0.05; TF=10067; benchMarkTf-ourTf=77

84: popSize=50; gensNum=200; fintnessVersion=1/tf^2; mutationPercet=0.03; mutationSize=0.01; TF=10069; benchMarkTf-ourTf=79

85: popSize=50; gensNum=200; fintnessVersion=1/tf^2; mutationPercet=0.03; mutationSize=0.03; TF=10020; benchMarkTf-ourTf=30

86: popSize=50; gensNum=200; fintnessVersion=1/tf^2; mutationPercet=0.03; mutationSize=0.05; TF=10015; benchMarkTf-ourTf=25

87: popSize=50; gensNum=200; fintnessVersion=1/tf^2; mutationPercet=0.05; mutationSize=0.01; TF=10042; benchMarkTf-ourTf=52

88: popSize=50; gensNum=200; fintnessVersion=1/tf^2; mutationPercet=0.05; mutationSize=0.03; TF=10019; benchMarkTf-ourTf=29

89: popSize=50; gensNum=200; fintnessVersion=1/tf^2; mutationPercet=0.05; mutationSize=0.05; TF=10034; benchMarkTf-ourTf=44

90: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.01; mutationSize=0.01; TF=10026; benchMarkTf-ourTf=36

91: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.01; mutationSize=0.03; TF=10031; benchMarkTf-ourTf=41

92: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.01; mutationSize=0.05; TF=10020; benchMarkTf-ourTf=30

93: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.03; mutationSize=0.01; TF=10020; benchMarkTf-ourTf=30

94: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.03; mutationSize=0.03; TF=10051; benchMarkTf-ourTf=61

95: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.03; mutationSize=0.05; TF=10048; benchMarkTf-ourTf=58

96: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.01; TF=10027; benchMarkTf-ourTf=37

97: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.03; TF=10020; benchMarkTf-ourTf=30

98: popSize=200; gensNum=50; fintnessVersion=diffFromU; mutationPercet=0.05; mutationSize=0.05; TF=10047; benchMarkTf-ourTf=57

99: popSize=200; gensNum=50; fintnessVersion=3ps; mutationPercet=0.01; mutationSize=0.01; TF=10060; benchMarkTf-ourTf=70

100: popSize=200; gensNum=50; fintnessVersion=3ps; mutationPercet=0.01; mutationSize=0.03; TF=10049; benchMarkTf-ourTf=59

101: popSize=200; gensNum=50; fintnessVersion=3ps; mutationPercet=0.01; mutationSize=0.05; TF=10021; benchMarkTf-ourTf=31

102: popSize=200; gensNum=50; fintnessVersion=3ps; mutationPercet=0.03; mutationSize=0.01; TF=10071; benchMarkTf-ourTf=81

103: popSize=200; gensNum=50; fintnessVersion=3ps; mutationPercet=0.03; mutationSize=0.03; TF=10074; benchMarkTf-ourTf=84

104: popSize=200; gensNum=50; fintnessVersion=3ps; mutationPercet=0.03; mutationSize=0.05; TF=10072; benchMarkTf-ourTf=82

105: popSize=200; gensNum=50; fintnessVersion=3ps; mutationPercet=0.05; mutationSize=0.01; TF=10048; benchMarkTf-ourTf=58

106: popSize=200; gensNum=50; fintnessVersion=3ps; mutationPercet=0.05; mutationSize=0.03; TF=10058; benchMarkTf-ourTf=68

107: popSize=200; gensNum=50; fintnessVersion=3ps; mutationPercet=0.05; mutationSize=0.05; TF=10053; benchMarkTf-ourTf=63

108: popSize=200; gensNum=50; fintnessVersion=1/tf; mutationPercet=0.01; mutationSize=0.01; TF=10031; benchMarkTf-ourTf=41

109: popSize=200; gensNum=50; fintnessVersion=1/tf; mutationPercet=0.01; mutationSize=0.03; TF=10055; benchMarkTf-ourTf=65

110: popSize=200; gensNum=50; fintnessVersion=1/tf; mutationPercet=0.01; mutationSize=0.05; TF=10046; benchMarkTf-ourTf=56

111: popSize=200; gensNum=50; fintnessVersion=1/tf; mutationPercet=0.03; mutationSize=0.01; TF=10035; benchMarkTf-ourTf=45

112: popSize=200; gensNum=50; fintnessVersion=1/tf; mutationPercet=0.03; mutationSize=0.03; TF=10043; benchMarkTf-ourTf=53

113: popSize=200; gensNum=50; fintnessVersion=1/tf; mutationPercet=0.03; mutationSize=0.05; TF=10032; benchMarkTf-ourTf=42

114: popSize=200; gensNum=50; fintnessVersion=1/tf; mutationPercet=0.05; mutationSize=0.01; TF=10058; benchMarkTf-ourTf=68

115: popSize=200; gensNum=50; fintnessVersion=1/tf; mutationPercet=0.05; mutationSize=0.03; TF=10082; benchMarkTf-ourTf=92

116: popSize=200; gensNum=50; fintnessVersion=1/tf; mutationPercet=0.05; mutationSize=0.05; TF=10072; benchMarkTf-ourTf=82

117: popSize=200; gensNum=50; fintnessVersion=1/root(tf); mutationPercet=0.01; mutationSize=0.01; TF=10045; benchMarkTf-ourTf=55

118: popSize=200; gensNum=50; fintnessVersion=1/root(tf); mutationPercet=0.01; mutationSize=0.03; TF=10088; benchMarkTf-ourTf=98

119: popSize=200; gensNum=50; fintnessVersion=1/root(tf); mutationPercet=0.01; mutationSize=0.05; TF=10029; benchMarkTf-ourTf=39

120: popSize=200; gensNum=50; fintnessVersion=1/root(tf); mutationPercet=0.03; mutationSize=0.01; TF=10073; benchMarkTf-ourTf=83

121: popSize=200; gensNum=50; fintnessVersion=1/root(tf); mutationPercet=0.03; mutationSize=0.03; TF=10069; benchMarkTf-ourTf=79

122: popSize=200; gensNum=50; fintnessVersion=1/root(tf); mutationPercet=0.03; mutationSize=0.05; TF=10044; benchMarkTf-ourTf=54

123: popSize=200; gensNum=50; fintnessVersion=1/root(tf); mutationPercet=0.05; mutationSize=0.01; TF=10069; benchMarkTf-ourTf=79

124: popSize=200; gensNum=50; fintnessVersion=1/root(tf); mutationPercet=0.05; mutationSize=0.03; TF=10069; benchMarkTf-ourTf=79

125: popSize=200; gensNum=50; fintnessVersion=1/root(tf); mutationPercet=0.05; mutationSize=0.05; TF=10044; benchMarkTf-ourTf=54

126: popSize=200; gensNum=50; fintnessVersion=1/tf^2; mutationPercet=0.01; mutationSize=0.01; TF=10066; benchMarkTf-ourTf=76

127: popSize=200; gensNum=50; fintnessVersion=1/tf^2; mutationPercet=0.01; mutationSize=0.03; TF=10036; benchMarkTf-ourTf=46

128: popSize=200; gensNum=50; fintnessVersion=1/tf^2; mutationPercet=0.01; mutationSize=0.05; TF=10037; benchMarkTf-ourTf=47

129: popSize=200; gensNum=50; fintnessVersion=1/tf^2; mutationPercet=0.03; mutationSize=0.01; TF=10047; benchMarkTf-ourTf=57

130: popSize=200; gensNum=50; fintnessVersion=1/tf^2; mutationPercet=0.03; mutationSize=0.03; TF=10036; benchMarkTf-ourTf=46

131: popSize=200; gensNum=50; fintnessVersion=1/tf^2; mutationPercet=0.03; mutationSize=0.05; TF=10035; benchMarkTf-ourTf=45

132: popSize=200; gensNum=50; fintnessVersion=1/tf^2; mutationPercet=0.05; mutationSize=0.01; TF=10050; benchMarkTf-ourTf=60

133: popSize=200; gensNum=50; fintnessVersion=1/tf^2; mutationPercet=0.05; mutationSize=0.03; TF=10079; benchMarkTf-ourTf=89

134: popSize=200; gensNum=50; fintnessVersion=1/tf^2; mutationPercet=0.05; mutationSize=0.05; TF=10060; benchMarkTf-ourTf=70