

Oct 27, 14 21:39

csc791sbse:hw7:Fu

Page 1/2

```

!!!! Schaffer
#mws Runtime: 0.419 secs
#sa Runtime: 0.134 secs
#de Runtime: 0.332 secs
#psa Runtime: 0.184 secs
#ga Runtime: 62.561 secs

rank ,      name ,      med ,      iqr
-----
1 ,      de ,      0 ,      0 ( *
1 ,      psa ,      0 ,      0 ( *
1 ,      sa ,      0 ,      0 ( *
1 ,      ga ,      0 ,      0 ( *
15 2 ,      mws ,      6 ,      23 ( *
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.01, 0.06, 0.19, 0.43

!!!! Fonseca
#mws Runtime: 0.424 secs
#sa Runtime: 0.253 secs
#de Runtime: 0.502 secs
#psa Runtime: 0.290 secs
#ga Runtime: 114.326 secs

rank ,      name ,      med ,      iqr
-----
1 ,      de ,      0 ,      0 ( *
1 ,      psa ,      0 ,      0 ( *
2 ,      ga ,      6 ,      11 ( *
3 ,      sa ,      21 ,      36 ( *
4 ,      mws ,      100 ,      0 (
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.06, 0.10, 0.13
      ), 0.00, 0.07, 0.21, 0.29, 0.58
      ), 1.00, 1.00, 1.00, 1.00, 1.00

!!!! Kursawe
#mws Runtime: 0.355 secs
#sa Runtime: 0.215 secs
#de Runtime: 0.824 secs
#psa Runtime: 0.852 secs
#ga Runtime: 146.949 secs

rank ,      name ,      med ,      iqr
-----
1 ,      de ,      0 ,      0 ( *
1 ,      psa ,      0 ,      0 ( *
45 1 ,      ga ,      0 ,      1 ( *
2 ,      sa ,      8 ,      8 ( *
3 ,      mws ,      48 ,      15 (
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.07
      ), 0.00, 0.00, 0.00, 0.01, 0.12
      ), 0.00, 0.04, 0.08, 0.11, 0.14
      ), 0.36, 0.43, 0.48, 0.56, 0.64

!!!! ZDT1
#mws Runtime: 0.286 secs
#sa Runtime: 0.149 secs
#de Runtime: 0.638 secs
#psa Runtime: 5.836 secs
#ga Runtime: 120.549 secs

rank ,      name ,      med ,      iqr
-----
1 ,      mws ,      0 ,      0 ( *
1 ,      de ,      0 ,      0 ( *
1 ,      ga ,      0 ,      0 ( *
2 ,      sa ,      19 ,      20 ( *
3 ,      psa ,      48 ,      15 (
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.02, 0.08, 0.19, 0.24, 0.34
      ), 0.29, 0.46, 0.48, 0.55, 0.69

!!!! ZDT3
#mws Runtime: 0.299 secs
#sa Runtime: 0.170 secs
#de Runtime: 0.913 secs
#psa Runtime: 0.412 secs
#ga Runtime: 153.445 secs

rank ,      name ,      med ,      iqr
-----
75 1 ,      de ,      0 ,      0 ( *
1 ,      psa ,      0 ,      0 ( *
1 ,      ga ,      0 ,      0 ( *
2 ,      sa ,      28 ,      20 ( *
2 ,      mws ,      45 ,      14 (
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.18, 0.24, 0.28, 0.38, 0.52
      ), 0.27, 0.36, 0.45, 0.49, 0.49

!!!! Viennet3
#mws Runtime: 0.228 secs
#sa Runtime: 0.181 secs
#de Runtime: 0.584 secs
#psa Runtime: 0.238 secs
#ga Runtime: 94.887 secs

rank ,      name ,      med ,      iqr
-----
90 1 ,      de ,      0 ,      0 ( *
1 ,      psa ,      0 ,      0 ( *
1 ,      sa ,      0 ,      1 ( *
2 ,      ga ,      2 ,      2 ( *
95 3 ,      mws ,      10 ,      26 ( *
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.01, 0.01
      ), 0.01, 0.01, 0.02, 0.03, 0.17
      ), 0.07, 0.08, 0.10, 0.33, 0.56

!!!! DTLZ7

```

Oct 27, 14 21:39

csc791sbse:hw7:Fu

Page 2/2

```

#mws Runtime: 0.759 secs
100 #sa Runtime: 0.418 secs
#de Runtime: 0.781 secs
#psa Runtime: 17.423 secs
#ga Runtime: 501.989 secs

105 rank ,      name ,      med ,      iqr
-----
1 ,      mws ,      0 ,      0 ( *
1 ,      de ,      0 ,      0 ( *
1 ,      ga ,      0 ,      0 ( *
110 2 ,      sa ,      11 ,      23 ( *
3 ,      psa ,      56 ,      27 (
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.11, 0.21, 0.37
      ), 0.40, 0.53, 0.56, 0.66, 0.74

!!!! Schwefel
115 #mws Runtime: 1.181 secs
#sa Runtime: 0.607 secs
#de Runtime: 1.732 secs
#psa Runtime: 20.593 secs
#ga Runtime: 10185.145 secs

120 rank ,      name ,      med ,      iqr
-----
1 ,      de ,      0 ,      0 ( *
1 ,      ga ,      0 ,      1 ( *
125 1 ,      psa ,      1 ,      4 ( *
2 ,      sa ,      8 ,      8 ( *
3 ,      mws ,      20 ,      13 (
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.00, 0.01, 0.02
      ), 0.00, 0.00, 0.01, 0.03, 0.06
      ), 0.01, 0.04, 0.08, 0.11, 0.14
      ), 0.08, 0.11, 0.20, 0.24, 0.38

!!!! Osyczka
130 #mws Runtime: 0.384 secs
#sa Runtime: 0.197 secs
#de Runtime: 0.339 secs
#psa Runtime: 2.918 secs
#ga Runtime: 110.811 secs

rank ,      name ,      med ,      iqr
-----
1 ,      sa ,      0 ,      0 ( *
1 ,      de ,      0 ,      0 ( *
2 ,      ga ,      8 ,      19 ( *
3 ,      mws ,      42 ,      14 (
4 ,      psa ,      65 ,      28 (
      ), 0.00, 0.00, 0.00, 0.00, 0.22
      ), 0.00, 0.00, 0.00, 0.00, 0.00
      ), 0.00, 0.00, 0.08, 0.17, 0.25
      ), 0.11, 0.38, 0.42, 0.50, 0.56
      ), 0.34, 0.56, 0.65, 0.79, 0.90

:de options
cr :0.3 f :0.75 np :100 repeats :100 threshold :1e-06
:ga options
crossPoints :2 crossRate :0.6 genNum :[100, 200, 400, 800] pop :50
:mws options
max_changes :1000 max_tries :20 prob :0.25 threshold :0.0001
:other options
al2 :0.56 baseline :1000 era :50 keep :64 lives :1 repeats :1
reportrange :False show :False xtile
:False
:psa options
N :30 phil :2.8 phi2 :1.3 repeats :1000 threshold :1e-06 w :1
155 :sa options
cooling :0.6 kmax :1000

```