

היי, לאחר השינוי בפורמט הבעיה שלנו, שינונו את BNB שיתאים לבעיה החדשה.

הרצנו את כל הקלטים בגודל 10 משימות BNB לא אכזב. בשורה התחתונה זה סיכום הריצה:

```
"Correct (size-numberCorrect):" QMap((10, 60))
```

```
"Mistakes(size-numberMistakes):" QMap()
```

```
"Total Avegare error: 0"
```

```
"Total time: 0.874 seconds"
```

אנחנו נריץ הלילה משימה בגודל 50 כדי (בתקווה) לראות תוצאות מחר בבוקר ונעדכן.

להלן כל הפלט של הריצה(אין כלום מעניין – סתם שתראי שיש תוצאות):

```
"number of input=60. distribution=all. range=all #jobs=10. #machines=all"
```

```
"-----START 1 from 60-----"
```

```
"input file number 1: inputName=C:/algo/h2/all2/NU_1_0010_05_0.txt and  
solutionName=C:/algo/h2/all2/SOL_NU_1_05_0010_0.txt"
```

```
****Data from file NU_1_0010_05_0.txt: machinesNum=5 jobsNum=10"
```

```
****SOLUTION Data from file SOL_NU_1_05_0010_0.txt: machinesNum=5 jobsNum=10
```

```
lowerBound=193 upperBound=193 isOptimal=1"
```

```
Content of machines summed (100, 193, 188, 192, 192)
```

```
input selected: size 10 sum 865
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----Our Results-----
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```
"tf=198. Machines:<99,90,1>,<98,95>,<98>,<97,95>,<96,96>"
```

```
"----Comparison for the 0 example----"
```

```
****tf from benchmark was 198(we added the number of machines) and target function from  
our bnb search is 198"
```

```
***RESULT IS THE SAME
```

```
Run time: 0.011 seconds
```

```
"Correct (size-numberCorrect):" QMap((10, 1))
```

```
"Mistakes(size-numberMistakes):" QMap()
```

```
"Avegare error: nan"
```

```
"-----END 1 from 60-----"
```

```
"-----START 2 from 60-----"
```

```
"input file number 2: inputName=C:/algo/h2/all2/NU_1_0010_05_1.txt and  
solutionName=C:/algo/h2/all2/SOL_NU_1_05_0010_1.txt"
```

```
****Data from file NU_1_0010_05_1.txt: machinesNum=5 jobsNum=10"
```

```
****SOLUTION Data from file SOL_NU_1_05_0010_1.txt: machinesNum=5 jobsNum=10
```

```
lowerBound=189 upperBound=189 isOptimal=1"
```

```
Content of machines summed (115, 189, 188, 188, 187)
```

```
input selected: size 10 sum 867
```

```
----Our Results-----
```

```
"tf=194. Machines:<100,15>,<99,90>,<98,90>,<97,91>,<94,93>"
```

```
"----Comparison for the 1 example----"
```

```
****tf from benchmark was 194(we added the number of machines) and target function from  
our bnb search is 194"
```

```
***RESULT IS THE SAME
```

```
Run time: 0.012 seconds
```

```
"Correct (size-numberCorrect):" QMap((10, 2))
```

```
"Mistakes(size-numberMistakes):" QMap()
```

```
"Avegare error: 0"
```

```
"-----END 2 from 60-----"
```

```

"-----START 3 from 60-----"


```

```

****tf from benchmark was 196(we added the number of machines) and target function from
our bnb search is 196"
***RESULT IS THE SAME
Run time: 0.011 seconds
"Correct (size-numberCorrect):" QMap((10, 5))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 5 from 60-----"
"-----START 6 from 60-----"
"input file number 6: inputName=C:/algo/h2/all2/NU_1_0010_05_5.txt and
solutionName=C:/algo/h2/all2/SOL_NU_1_05_0010_5.txt"
****Data from file NU_1_0010_05_5.txt: machinesNum=5 jobsNum=10"
****SOLUTION Data from file SOL_NU_1_05_0010_5.txt: machinesNum=5 jobsNum=10
lowerBound=189 upperBound=189 isOptimal=1"
Content of machines summed (113, 189, 188, 187, 187)
input selected: size 10 sum 864
----Our Results-----
"tf=194. Machines:<100,13>,<97,92>,<96,92>,<94,93>,<94,93>"
"----Comparison for the 5 example----"
****tf from benchmark was 194(we added the number of machines) and target function from
our bnb search is 194"
***RESULT IS THE SAME
Run time: 0.021 seconds
"Correct (size-numberCorrect):" QMap((10, 6))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 6 from 60-----"
"-----START 7 from 60-----"
"input file number 7: inputName=C:/algo/h2/all2/NU_1_0010_05_6.txt and
solutionName=C:/algo/h2/all2/SOL_NU_1_05_0010_6.txt"
****Data from file NU_1_0010_05_6.txt: machinesNum=5 jobsNum=10"
****SOLUTION Data from file SOL_NU_1_05_0010_6.txt: machinesNum=5 jobsNum=10
lowerBound=188 upperBound=188 isOptimal=1"
Content of machines summed (102, 188, 188, 188, 187)
input selected: size 10 sum 853
----Our Results-----
"tf=193. Machines:<99,3>,<98,90>,<96,92>,<95,93>,<95,92>"
"----Comparison for the 6 example----"
****tf from benchmark was 193(we added the number of machines) and target function from
our bnb search is 193"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 7))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 7 from 60-----"
"-----START 8 from 60-----"
"input file number 8: inputName=C:/algo/h2/all2/NU_1_0010_05_7.txt and
solutionName=C:/algo/h2/all2/SOL_NU_1_05_0010_7.txt"
****Data from file NU_1_0010_05_7.txt: machinesNum=5 jobsNum=10"

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```

***SOLUTION Data from file SOL_NU_1_05_0010_7.txt: machinesNum=5 jobsNum=10
lowerBound=190 upperBound=190 isOptimal=1"
Content of machines summed (119, 189, 188, 190, 189)
input selected: size 10 sum 875
----Our Results-----
"tf=195. Machines:<99,91>,<97,92>,<97,20>,<96,94>,<95,94>"
"----Comparison for the 7 example----"
***tf from benchmark was 195(we added the number of machines) and target function from
our bnb search is 195"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 8))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 8 from 60-----"
"-----START 9 from 60-----"
"input file number 9: inputName=C:/algo/h2/all2/NU_1_0010_05_8.txt and
solutionName=C:/algo/h2/all2/SOL_NU_1_05_0010_8.txt"
***Data from file NU_1_0010_05_8.txt: machinesNum=5 jobsNum=10"
***SOLUTION Data from file SOL_NU_1_05_0010_8.txt: machinesNum=5 jobsNum=10
lowerBound=190 upperBound=190 isOptimal=1"
Content of machines summed (190, 113, 189, 189, 189)
input selected: size 10 sum 870
----Our Results-----
"tf=195. Machines:<100,90>,<100,13>,<98,91>,<95,94>,<95,94>"
"----Comparison for the 8 example----"
***tf from benchmark was 195(we added the number of machines) and target function from
our bnb search is 195"
***RESULT IS THE SAME
Run time: 0.015 seconds
"Correct (size-numberCorrect):" QMap((10, 9))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 9 from 60-----"
"-----START 10 from 60-----"
"input file number 10: inputName=C:/algo/h2/all2/NU_1_0010_05_9.txt and
solutionName=C:/algo/h2/all2/SOL_NU_1_05_0010_9.txt"
***Data from file NU_1_0010_05_9.txt: machinesNum=5 jobsNum=10"
***SOLUTION Data from file SOL_NU_1_05_0010_9.txt: machinesNum=5 jobsNum=10
lowerBound=190 upperBound=190 isOptimal=1"
Content of machines summed (189, 107, 190, 188, 190)
input selected: size 10 sum 864
----Our Results-----
"tf=195. Machines:<98,92>,<98,91>,<96,94>,<96,9>,<95,95>"
"----Comparison for the 9 example----"
***tf from benchmark was 195(we added the number of machines) and target function from
our bnb search is 195"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 10))

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"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 10 from 60-----"
"-----START 11 from 60-----"
"input file number 11: inputName=C:/algo/h2/all2/NU_2_0010_05_0.txt and
solutionName=C:/algo/h2/all2/SOL_NU_2_05_0010_0.txt"
"***Data from file NU_2_0010_05_0.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_2_05_0010_0.txt: machinesNum=5 jobsNum=10
lowerBound=1918 upperBound=1918 isOptimal=1"
Content of machines summed (992, 1887, 1918, 1918, 1916)
input selected: size 10 sum 8631
----Our Results-----
"tf=1923. Machines:<990,905,2>,<982>,<973,945>,<967,951>,<960,956>"
"----Comparison for the 10 example----"
"***tf from benchmark was 1923(we added the number of machines) and target function
from our bnb search is 1923"
***RESULT IS THE SAME
Run time: 0.01 seconds
"Correct (size-numberCorrect):" QMap((10, 11))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 11 from 60-----"
"-----START 12 from 60-----"
"input file number 12: inputName=C:/algo/h2/all2/NU_2_0010_05_1.txt and
solutionName=C:/algo/h2/all2/SOL_NU_2_05_0010_1.txt"
"***Data from file NU_2_0010_05_1.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_2_05_0010_1.txt: machinesNum=5 jobsNum=10
lowerBound=1891 upperBound=1891 isOptimal=1"
Content of machines summed (1135, 1891, 1877, 1883, 1868)
input selected: size 10 sum 8654
----Our Results-----
"tf=1896. Machines:<993,142>,<989,902>,<975,902>,<970,913>,<938,930>"
"----Comparison for the 11 example----"
"***tf from benchmark was 1896(we added the number of machines) and target function
from our bnb search is 1896"
***RESULT IS THE SAME
Run time: 0.014 seconds
"Correct (size-numberCorrect):" QMap((10, 12))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 12 from 60-----"
"-----START 13 from 60-----"
"input file number 13: inputName=C:/algo/h2/all2/NU_2_0010_05_2.txt and
solutionName=C:/algo/h2/all2/SOL_NU_2_05_0010_2.txt"
"***Data from file NU_2_0010_05_2.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_2_05_0010_2.txt: machinesNum=5 jobsNum=10
lowerBound=1864 upperBound=1864 isOptimal=1"
Content of machines summed (1030, 1855, 1852, 1864, 1856)
input selected: size 10 sum 8457
----Our Results-----

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"tf=1869. Machines:<1000,30>,<948,912>,<940,907>,<937,927>,<929,927>"
"----Comparison for the 12 example----"
"***tf from benchmark was 1869(we added the number of machines) and target function
from our bnb search is 1869"
***RESULT IS THE SAME
Run time: 0.01 seconds
"Correct (size-numberCorrect):" QMap((10, 13))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 13 from 60-----"
"-----START 14 from 60-----"
"input file number 14: inputName=C:/algo/h2/all2/NU_2_0010_05_3.txt and
solutionName=C:/algo/h2/all2/SOL_NU_2_05_0010_3.txt"
"***Data from file NU_2_0010_05_3.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_2_05_0010_3.txt: machinesNum=5 jobsNum=10
lowerBound=1879 upperBound=1879 isOptimal=1"
Content of machines summed (1875, 1035, 1879, 1839, 1834)
input selected: size 10 sum 8462
----Our Results-----
"tf=1884. Machines:<972,903>,<972,63>,<969,910>,<929,910>,<923,911>"
"----Comparison for the 13 example----"
"***tf from benchmark was 1884(we added the number of machines) and target function
from our bnb search is 1884"
***RESULT IS THE SAME
Run time: 0.017 seconds
"Correct (size-numberCorrect):" QMap((10, 14))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 14 from 60-----"
"-----START 15 from 60-----"
"input file number 15: inputName=C:/algo/h2/all2/NU_2_0010_05_4.txt and
solutionName=C:/algo/h2/all2/SOL_NU_2_05_0010_4.txt"
"***Data from file NU_2_0010_05_4.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_2_05_0010_4.txt: machinesNum=5 jobsNum=10
lowerBound=1904 upperBound=1904 isOptimal=1"
Content of machines summed (1093, 1891, 1901, 1904, 1902)
input selected: size 10 sum 8691
----Our Results-----
"tf=1909. Machines:<998,95>,<978,913>,<968,933>,<964,940>,<952,950>"
"----Comparison for the 14 example----"
"***tf from benchmark was 1909(we added the number of machines) and target function
from our bnb search is 1909"
***RESULT IS THE SAME
Run time: 0.01 seconds
"Correct (size-numberCorrect):" QMap((10, 15))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 15 from 60-----"
"-----START 16 from 60-----"

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"input file number 16: inputName=C:/algo/h2/all2/NU_2_0010_05_5.txt and
solutionName=C:/algo/h2/all2/SOL_NU_2_05_0010_5.txt"
"***Data from file NU_2_0010_05_5.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_2_05_0010_5.txt: machinesNum=5 jobsNum=10
lowerBound=1885 upperBound=1885 isOptimal=1"
Content of machines summed (1121, 1885, 1880, 1869, 1870)
input selected: size 10 sum 8625
----Our Results-----
"tf=1890. Machines:<995,126>,<965,920>,<958,922>,<939,930>,<937,933>"
"----Comparison for the 15 example----"
"***tf from benchmark was 1890(we added the number of machines) and target function
from our bnb search is 1890"
***RESULT IS THE SAME
Run time: 0.02 seconds
"Correct (size-numberCorrect):" QMap((10, 16))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 16 from 60-----"
"-----START 17 from 60-----"
"input file number 17: inputName=C:/algo/h2/all2/NU_2_0010_05_6.txt and
solutionName=C:/algo/h2/all2/SOL_NU_2_05_0010_6.txt"
"***Data from file NU_2_0010_05_6.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_2_05_0010_6.txt: machinesNum=5 jobsNum=10
lowerBound=1885 upperBound=1885 isOptimal=1"
Content of machines summed (1006, 1875, 1876, 1876, 1885)
input selected: size 10 sum 8518
----Our Results-----
"tf=1890. Machines:<983,901>,<974,23>,<956,923>,<953,920>,<952,933>"
"----Comparison for the 16 example----"
"***tf from benchmark was 1890(we added the number of machines) and target function
from our bnb search is 1890"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 17))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 17 from 60-----"
"-----START 18 from 60-----"
"input file number 18: inputName=C:/algo/h2/all2/NU_2_0010_05_7.txt and
solutionName=C:/algo/h2/all2/SOL_NU_2_05_0010_7.txt"
"***Data from file NU_2_0010_05_7.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_2_05_0010_7.txt: machinesNum=5 jobsNum=10
lowerBound=1902 upperBound=1902 isOptimal=1"
Content of machines summed (1187, 1884, 1886, 1902, 1893)
input selected: size 10 sum 8752
----Our Results-----
"tf=1907. Machines:<990,197>,<969,919>,<967,915>,<961,941>,<949,944>"
"----Comparison for the 17 example----"
"***tf from benchmark was 1907(we added the number of machines) and target function
from our bnb search is 1907"

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***RESULT IS THE SAME

Run time: 0.01 seconds

"Correct (size-numberCorrect):" QMap((10, 18))

"Mistakes(size-numberMistakes):" QMap()

"Avegare error: 0"

"-----END 18 from 60-----"

"-----START 19 from 60-----"

"input file number 19: inputName=C:/algo/h2/all2/NU_2_0010_05_8.txt and
solutionName=C:/algo/h2/all2/SOL_NU_2_05_0010_8.txt"

***Data from file NU_2_0010_05_8.txt: machinesNum=5 jobsNum=10"

***SOLUTION Data from file SOL_NU_2_05_0010_8.txt: machinesNum=5 jobsNum=10
lowerBound=1896 upperBound=1896 isOptimal=1"

Content of machines summed (1124, 1896, 1888, 1888, 1888)

input selected: size 10 sum 8684

----Our Results-----

"tf=1901. Machines:<999,125>,<995,901>,<975,913>,<947,941>,<947,941>"

"----Comparison for the 18 example----

***tf from benchmark was 1901(we added the number of machines) and target function
from our bnb search is 1901"

***RESULT IS THE SAME

Run time: 0.024 seconds

"Correct (size-numberCorrect):" QMap((10, 19))

"Mistakes(size-numberMistakes):" QMap()

"Avegare error: 0"

"-----END 19 from 60-----"

"-----START 20 from 60-----"

"input file number 20: inputName=C:/algo/h2/all2/NU_2_0010_05_9.txt and
solutionName=C:/algo/h2/all2/SOL_NU_2_05_0010_9.txt"

***Data from file NU_2_0010_05_9.txt: machinesNum=5 jobsNum=10"

***SOLUTION Data from file SOL_NU_2_05_0010_9.txt: machinesNum=5 jobsNum=10
lowerBound=1902 upperBound=1902 isOptimal=1"

Content of machines summed (1889, 1066, 1888, 1902, 1900)

input selected: size 10 sum 8645

----Our Results-----

"tf=1907. Machines:<980,909>,<980,86>,<963,925>,<958,944>,<953,947>"

"----Comparison for the 19 example----

***tf from benchmark was 1907(we added the number of machines) and target function
from our bnb search is 1907"

***RESULT IS THE SAME

Run time: 0.014 seconds

"Correct (size-numberCorrect):" QMap((10, 20))

"Mistakes(size-numberMistakes):" QMap()

"Avegare error: 0"

"-----END 20 from 60-----"

"-----START 21 from 60-----"

"input file number 21: inputName=C:/algo/h2/all2/NU_3_0010_05_0.txt and
solutionName=C:/algo/h2/all2/SOL_NU_3_05_0010_0.txt"

***Data from file NU_3_0010_05_0.txt: machinesNum=5 jobsNum=10"

***SOLUTION Data from file SOL_NU_3_05_0010_0.txt: machinesNum=5 jobsNum=10
lowerBound=19186 upperBound=19186 isOptimal=1"

Content of machines summed (9913, 18873, 19186, 19177, 19158)
input selected: size 10 sum 86307
----Our Results-----
"tf=19191. Machines:<9901,9055,12>,<9818>,<9731,9455>,<9666,9511>,<9595,9563>"
"----Comparison for the 20 example----"
"***tf from benchmark was 19191(we added the number of machines) and target function
from our bnb search is 19191"
***RESULT IS THE SAME
Run time: 0.012 seconds
"Correct (size-numberCorrect):" QMap((10, 21))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 21 from 60-----"
"-----START 22 from 60-----"
"input file number 22: inputName=C:/algo/h2/all2/NU_3_0010_05_1.txt and
solutionName=C:/algo/h2/all2/SOL_NU_3_05_0010_1.txt"
"***Data from file NU_3_0010_05_1.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_3_05_0010_1.txt: machinesNum=5 jobsNum=10
lowerBound=18907 upperBound=18907 isOptimal=1"
Content of machines summed (11335, 18907, 18767, 18837, 18678)
input selected: size 10 sum 86524
----Our Results-----
"tf=18912. Machines:<9921,1414>,<9885,9022>,<9744,9023>,<9700,9137>,<9379,9299>"
"----Comparison for the 21 example----"
"***tf from benchmark was 18912(we added the number of machines) and target function
from our bnb search is 18912"
***RESULT IS THE SAME
Run time: 0.016 seconds
"Correct (size-numberCorrect):" QMap((10, 22))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 22 from 60-----"
"-----START 23 from 60-----"
"input file number 23: inputName=C:/algo/h2/all2/NU_3_0010_05_2.txt and
solutionName=C:/algo/h2/all2/SOL_NU_3_05_0010_2.txt"
"***Data from file NU_3_0010_05_2.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_3_05_0010_2.txt: machinesNum=5 jobsNum=10
lowerBound=18644 upperBound=18644 isOptimal=1"
Content of machines summed (10290, 18554, 18526, 18644, 18569)
input selected: size 10 sum 84583
----Our Results-----
"tf=18649. Machines:<9999,291>,<9476,9125>,<9401,9078>,<9373,9271>,<9297,9272>"
"----Comparison for the 22 example----"
"***tf from benchmark was 18649(we added the number of machines) and target function
from our bnb search is 18649"
***RESULT IS THE SAME
Run time: 0.011 seconds
"Correct (size-numberCorrect):" QMap((10, 23))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"

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"-----END 23 from 60-----"
"-----START 24 from 60-----"
"input file number 24: inputName=C:/algo/h2/all2/NU_3_0010_05_3.txt and
solutionName=C:/algo/h2/all2/SOL_NU_3_05_0010_3.txt"
"***Data from file NU_3_0010_05_3.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_3_05_0010_3.txt: machinesNum=5 jobsNum=10
lowerBound=18793 upperBound=18793 isOptimal=1"
Content of machines summed (10351, 18750, 18793, 18393, 18349)
input selected: size 10 sum 84636
----Our Results-----
"tf=18798. Machines:<9721,9032>,<9718,630>,<9691,9102>,<9289,9104>,<9231,9118>"
"----Comparison for the 23 example----"
"***tf from benchmark was 18798(we added the number of machines) and target function
from our bnb search is 18798"
***RESULT IS THE SAME
Run time: 0.017 seconds
"Correct (size-numberCorrect):" QMap((10, 24))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 24 from 60-----"
"-----START 25 from 60-----"
"input file number 25: inputName=C:/algo/h2/all2/NU_3_0010_05_4.txt and
solutionName=C:/algo/h2/all2/SOL_NU_3_05_0010_4.txt"
"***Data from file NU_3_0010_05_4.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_3_05_0010_4.txt: machinesNum=5 jobsNum=10
lowerBound=19038 upperBound=19038 isOptimal=1"
Content of machines summed (10921, 18916, 19008, 19038, 19018)
input selected: size 10 sum 86901
----Our Results-----
"tf=19043. Machines:<9973,948>,<9781,9135>,<9676,9332>,<9638,9400>,<9519,9499>"
"----Comparison for the 24 example----"
"***tf from benchmark was 19043(we added the number of machines) and target function
from our bnb search is 19043"
***RESULT IS THE SAME
Run time: 0.011 seconds
"Correct (size-numberCorrect):" QMap((10, 25))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 25 from 60-----"
"-----START 26 from 60-----"
"input file number 26: inputName=C:/algo/h2/all2/NU_3_0010_05_5.txt and
solutionName=C:/algo/h2/all2/SOL_NU_3_05_0010_5.txt"
"***Data from file NU_3_0010_05_5.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_3_05_0010_5.txt: machinesNum=5 jobsNum=10
lowerBound=18856 upperBound=18856 isOptimal=1"
Content of machines summed (11204, 18856, 18803, 18691, 18698)
input selected: size 10 sum 86252
----Our Results-----
"tf=18861. Machines:<9946,1258>,<9651,9205>,<9579,9224>,<9390,9301>,<9368,9330>"
"----Comparison for the 25 example----"

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****tf from benchmark was 18861(we added the number of machines) and target function
from our bnb search is 18861"
***RESULT IS THE SAME
Run time: 0.022 seconds
"Correct (size-numberCorrect):" QMap((10, 26))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 26 from 60-----"
"-----START 27 from 60-----"
"input file number 27: inputName=C:/algo/h2/all2/NU_3_0010_05_6.txt and
solutionName=C:/algo/h2/all2/SOL_NU_3_05_0010_6.txt"
****Data from file NU_3_0010_05_6.txt: machinesNum=5 jobsNum=10"
****SOLUTION Data from file SOL_NU_3_05_0010_6.txt: machinesNum=5 jobsNum=10
lowerBound=18856 upperBound=18856 isOptimal=1"
Content of machines summed (10055, 18753, 18764, 18764, 18856)
input selected: size 10 sum 85192
----Our Results-----
"tf=18861. Machines:<9826,9015>,<9738,229>,<9564,9232>,<9532,9200>,<9525,9331>"
"----Comparison for the 26 example----"
****tf from benchmark was 18861(we added the number of machines) and target function
from our bnb search is 18861"
***RESULT IS THE SAME
Run time: 0.01 seconds
"Correct (size-numberCorrect):" QMap((10, 27))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 27 from 60-----"
"-----START 28 from 60-----"
"input file number 28: inputName=C:/algo/h2/all2/NU_3_0010_05_7.txt and
solutionName=C:/algo/h2/all2/SOL_NU_3_05_0010_7.txt"
****Data from file NU_3_0010_05_7.txt: machinesNum=5 jobsNum=10"
****SOLUTION Data from file SOL_NU_3_05_0010_7.txt: machinesNum=5 jobsNum=10
lowerBound=19018 upperBound=19018 isOptimal=1"
Content of machines summed (11862, 18841, 18868, 19018, 18922)
input selected: size 10 sum 87511
----Our Results-----
"tf=19023. Machines:<9898,1964>,<9685,9196>,<9672,9156>,<9612,9406>,<9486,9436>"
"----Comparison for the 27 example----"
****tf from benchmark was 19023(we added the number of machines) and target function
from our bnb search is 19023"
***RESULT IS THE SAME
Run time: 0.014 seconds
"Correct (size-numberCorrect):" QMap((10, 28))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 28 from 60-----"
"-----START 29 from 60-----"
"input file number 29: inputName=C:/algo/h2/all2/NU_3_0010_05_8.txt and
solutionName=C:/algo/h2/all2/SOL_NU_3_05_0010_8.txt"
****Data from file NU_3_0010_05_8.txt: machinesNum=5 jobsNum=10"

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***SOLUTION Data from file SOL_NU_3_05_0010_8.txt: machinesNum=5 jobsNum=10
lowerBound=18968 upperBound=18968 isOptimal=1"
Content of machines summed (11230, 18968, 18882, 18887, 18881)
input selected: size 10 sum 86848
----Our Results-----
"tf=18973. Machines:<9988,1242>,<9950,9018>,<9751,9131>,<9474,9413>,<9466,9415>"
"----Comparison for the 28 example----"
"***tf from benchmark was 18973(we added the number of machines) and target function
from our bnb search is 18973"
***RESULT IS THE SAME
Run time: 0.029 seconds
"Correct (size-numberCorrect):" QMap((10, 29))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 29 from 60-----"
"-----START 30 from 60-----"
"input file number 30: inputName=C:/algo/h2/all2/NU_3_0010_05_9.txt and
solutionName=C:/algo/h2/all2/SOL_NU_3_05_0010_9.txt"
"***Data from file NU_3_0010_05_9.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_NU_3_05_0010_9.txt: machinesNum=5 jobsNum=10
lowerBound=19014 upperBound=19014 isOptimal=1"
Content of machines summed (10653, 18891, 18884, 19014, 19003)
input selected: size 10 sum 86445
----Our Results-----
"tf=19019. Machines:<9798,9098>,<9793,855>,<9629,9255>,<9578,9436>,<9534,9469>"
"----Comparison for the 29 example----"
"***tf from benchmark was 19019(we added the number of machines) and target function
from our bnb search is 19019"
***RESULT IS THE SAME
Run time: 0.011 seconds
"Correct (size-numberCorrect):" QMap((10, 30))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 30 from 60-----"
"-----START 31 from 60-----"
"input file number 31: inputName=C:/algo/h2/all2/U_1_0010_05_0.txt and
solutionName=C:/algo/h2/all2/SOL_U_1_05_0010_0.txt"
"***Data from file U_1_0010_05_0.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_1_05_0010_0.txt: machinesNum=5 jobsNum=10
lowerBound=101 upperBound=101 isOptimal=1"
Content of machines summed (92, 87, 94, 96, 101)
input selected: size 10 sum 470
----Our Results-----
"tf=106. Machines:<92,5,2>,<80>,<68,26>,<61,35>,<53,48>"
"----Comparison for the 30 example----"
"***tf from benchmark was 106(we added the number of machines) and target function from
our bnb search is 106"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 31))

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"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 31 from 60-----"
"-----START 32 from 60-----"
"input file number 32: inputName=C:/algo/h2/all2/U_1_0010_05_1.txt and
solutionName=C:/algo/h2/all2/SOL_U_1_05_0010_1.txt"
"***Data from file U_1_0010_05_1.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_1_05_0010_1.txt: machinesNum=5 jobsNum=10
lowerBound=86 upperBound=86 isOptimal=1"
Content of machines summed (86, 78, 76, 75, 77)
input selected: size 10 sum 392
----Our Results-----
"tf=91. Machines:<86>,<67,11,4>,<52,33>,<44,40>,<31,24>"
"----Comparison for the 31 example----"
"***tf from benchmark was 91(we added the number of machines) and target function from
our bnb search is 91"
***RESULT IS THE SAME
Run time: 0.004 seconds
"Correct (size-numberCorrect):" QMap((10, 32))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 32 from 60-----"
"-----START 33 from 60-----"
"input file number 33: inputName=C:/algo/h2/all2/U_1_0010_05_2.txt and
solutionName=C:/algo/h2/all2/SOL_U_1_05_0010_2.txt"
"***Data from file U_1_0010_05_2.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_1_05_0010_2.txt: machinesNum=5 jobsNum=10
lowerBound=116 upperBound=116 isOptimal=1"
Content of machines summed (111, 101, 116, 106, 116)
input selected: size 10 sum 550
----Our Results-----
"tf=121. Machines:<81,34>,<81,30>,<72,44>,<72,20>,<63,53>"
"----Comparison for the 32 example----"
"***tf from benchmark was 121(we added the number of machines) and target function from
our bnb search is 121"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 33))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 33 from 60-----"
"-----START 34 from 60-----"
"input file number 34: inputName=C:/algo/h2/all2/U_1_0010_05_3.txt and
solutionName=C:/algo/h2/all2/SOL_U_1_05_0010_3.txt"
"***Data from file U_1_0010_05_3.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_1_05_0010_3.txt: machinesNum=5 jobsNum=10
lowerBound=125 upperBound=125 isOptimal=1"
Content of machines summed (100, 125, 120, 112, 120)
input selected: size 10 sum 577
----Our Results-----

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"tf=130. Machines:<97,3>,<85,40>,<78,42>,<68,44>,<62,58>"
"----Comparison for the 33 example----"
"***tf from benchmark was 130(we added the number of machines) and target function from
our bnb search is 130"
***RESULT IS THE SAME
Run time: 0.015 seconds
"Correct (size-numberCorrect):" QMap((10, 34))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 34 from 60-----"
"-----START 35 from 60-----"
"input file number 35: inputName=C:/algo/h2/all2/U_1_0010_05_4.txt and
solutionName=C:/algo/h2/all2/SOL_U_1_05_0010_4.txt"
"***Data from file U_1_0010_05_4.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_1_05_0010_4.txt: machinesNum=5 jobsNum=10
lowerBound=89 upperBound=89 isOptimal=1"
Content of machines summed (69, 76, 68, 80, 89)
input selected: size 10 sum 382
----Our Results-----
"tf=94. Machines:<65,14,4>,<63,13>,<54,28>,<52>,<50,39>"
"----Comparison for the 34 example----"
"***tf from benchmark was 94(we added the number of machines) and target function from
our bnb search is 94"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 35))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 35 from 60-----"
"-----START 36 from 60-----"
"input file number 36: inputName=C:/algo/h2/all2/U_1_0010_05_5.txt and
solutionName=C:/algo/h2/all2/SOL_U_1_05_0010_5.txt"
"***Data from file U_1_0010_05_5.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_1_05_0010_5.txt: machinesNum=5 jobsNum=10
lowerBound=121 upperBound=121 isOptimal=1"
Content of machines summed (95, 95, 109, 109, 121)
input selected: size 10 sum 529
----Our Results-----
"tf=126. Machines:<95,6,4>,<85,32>,<79,30>,<77>,<69,52>"
"----Comparison for the 35 example----"
"***tf from benchmark was 126(we added the number of machines) and target function from
our bnb search is 126"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 36))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 36 from 60-----"
"-----START 37 from 60-----"

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"input file number 37: inputName=C:/algo/h2/all2/U_1_0010_05_6.txt and
solutionName=C:/algo/h2/all2/SOL_U_1_05_0010_6.txt"
"***Data from file U_1_0010_05_6.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_1_05_0010_6.txt: machinesNum=5 jobsNum=10
lowerBound=113 upperBound=113 isOptimal=1"
Content of machines summed (113, 113, 108, 92, 83)
input selected: size 10 sum 509
----Our Results-----
"tf=118. Machines:<93,10,5>,<92>,<83>,<67,46>,<40,39,34>"
"----Comparison for the 36 example----"
"***tf from benchmark was 118(we added the number of machines) and target function from
our bnb search is 118"
***RESULT IS THE SAME
Run time: 0.014 seconds
"Correct (size-numberCorrect):" QMap((10, 37))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 37 from 60-----"
"-----START 38 from 60-----"
"input file number 38: inputName=C:/algo/h2/all2/U_1_0010_05_7.txt and
solutionName=C:/algo/h2/all2/SOL_U_1_05_0010_7.txt"
"***Data from file U_1_0010_05_7.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_1_05_0010_7.txt: machinesNum=5 jobsNum=10
lowerBound=99 upperBound=99 isOptimal=1"
Content of machines summed (99, 90, 88, 93, 93)
input selected: size 10 sum 463
----Our Results-----
"tf=104. Machines:<99>,<90>,<68,26>,<63,20,11>,<56,20,10>"
"----Comparison for the 37 example----"
"***tf from benchmark was 104(we added the number of machines) and target function from
our bnb search is 104"
***RESULT IS THE SAME
Run time: 0.004 seconds
"Correct (size-numberCorrect):" QMap((10, 38))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 38 from 60-----"
"-----START 39 from 60-----"
"input file number 39: inputName=C:/algo/h2/all2/U_1_0010_05_8.txt and
solutionName=C:/algo/h2/all2/SOL_U_1_05_0010_8.txt"
"***Data from file U_1_0010_05_8.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_1_05_0010_8.txt: machinesNum=5 jobsNum=10
lowerBound=116 upperBound=116 isOptimal=1"
Content of machines summed (100, 106, 102, 112, 116)
input selected: size 10 sum 536
----Our Results-----
"tf=121. Machines:<91,17>,<90,16,9>,<85>,<69,43>,<66,50>"
"----Comparison for the 38 example----"
"***tf from benchmark was 121(we added the number of machines) and target function from
our bnb search is 121"

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***RESULT IS THE SAME

Run time: 0.01 seconds

"Correct (size-numberCorrect):" QMap((10, 39))

"Mistakes(size-numberMistakes):" QMap()

"Avegare error: 0"

"-----END 39 from 60-----"

"-----START 40 from 60-----"

"input file number 40: inputName=C:/algo/h2/all2/U_1_0010_05_9.txt and
solutionName=C:/algo/h2/all2/SOL_U_1_05_0010_9.txt"

***Data from file U_1_0010_05_9.txt: machinesNum=5 jobsNum=10"

***SOLUTION Data from file SOL_U_1_05_0010_9.txt: machinesNum=5 jobsNum=10
lowerBound=104 upperBound=104 isOptimal=1"

Content of machines summed (85, 97, 104, 94, 86)

input selected: size 10 sum 466

----Our Results-----

"tf=109. Machines:<80,5>,<69,28>,<68,36>,<53,41>,<43,43>"

"----Comparison for the 39 example----

***tf from benchmark was 109(we added the number of machines) and target function from
our bnb search is 109"

***RESULT IS THE SAME

Run time: 0.035 seconds

"Correct (size-numberCorrect):" QMap((10, 40))

"Mistakes(size-numberMistakes):" QMap()

"Avegare error: 0"

"-----END 40 from 60-----"

"-----START 41 from 60-----"

"input file number 41: inputName=C:/algo/h2/all2/U_2_0010_05_0.txt and
solutionName=C:/algo/h2/all2/SOL_U_2_05_0010_0.txt"

***Data from file U_2_0010_05_0.txt: machinesNum=5 jobsNum=10"

***SOLUTION Data from file SOL_U_2_05_0010_0.txt: machinesNum=5 jobsNum=10
lowerBound=1354 upperBound=1354 isOptimal=1"

Content of machines summed (1149, 1155, 1290, 1354, 1255)

input selected: size 10 sum 6203

----Our Results-----

"tf=1359. Machines:<973,230>,<925,176>,<859,431>,<837,517>,<696,559>"

"----Comparison for the 40 example----

***tf from benchmark was 1359(we added the number of machines) and target function
from our bnb search is 1359"

***RESULT IS THE SAME

Run time: 0.011 seconds

"Correct (size-numberCorrect):" QMap((10, 41))

"Mistakes(size-numberMistakes):" QMap()

"Avegare error: 0"

"-----END 41 from 60-----"

"-----START 42 from 60-----"

"input file number 42: inputName=C:/algo/h2/all2/U_2_0010_05_1.txt and
solutionName=C:/algo/h2/all2/SOL_U_2_05_0010_1.txt"

***Data from file U_2_0010_05_1.txt: machinesNum=5 jobsNum=10"

***SOLUTION Data from file SOL_U_2_05_0010_1.txt: machinesNum=5 jobsNum=10
lowerBound=1108 upperBound=1108 isOptimal=1"

Content of machines summed (957, 905, 898, 1106, 1108)
input selected: size 10 sum 4974
----Our Results-----
"tf=1113. Machines:<957,107,30>,<858,17>,<791>,<620,486>,<608,500>"
"----Comparison for the 41 example----"
"***tf from benchmark was 1113(we added the number of machines) and target function from our bnb search is 1113"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 42))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 42 from 60-----"
"-----START 43 from 60-----"
"input file number 43: inputName=C:/algo/h2/all2/U_2_0010_05_2.txt and solutionName=C:/algo/h2/all2/SOL_U_2_05_0010_2.txt"
"***Data from file U_2_0010_05_2.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_2_05_0010_2.txt: machinesNum=5 jobsNum=10 lowerBound=961 upperBound=961 isOptimal=1"
Content of machines summed (961, 953, 844, 932, 876)
input selected: size 10 sum 4566
----Our Results-----
"tf=966. Machines:<961>,<953>,<787,172>,<542,391>,<292,218,193,57>"
"----Comparison for the 42 example----"
"***tf from benchmark was 966(we added the number of machines) and target function from our bnb search is 966"
***RESULT IS THE SAME
Run time: 0.005 seconds
"Correct (size-numberCorrect):" QMap((10, 43))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 43 from 60-----"
"-----START 44 from 60-----"
"input file number 44: inputName=C:/algo/h2/all2/U_2_0010_05_3.txt and solutionName=C:/algo/h2/all2/SOL_U_2_05_0010_3.txt"
"***Data from file U_2_0010_05_3.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_2_05_0010_3.txt: machinesNum=5 jobsNum=10 lowerBound=1127 upperBound=1127 isOptimal=1"
Content of machines summed (1046, 1117, 1093, 1127, 1083)
input selected: size 10 sum 5466
----Our Results-----
"tf=1132. Machines:<985,61>,<825,292>,<788,305>,<656,471>,<597,486>"
"----Comparison for the 43 example----"
"***tf from benchmark was 1132(we added the number of machines) and target function from our bnb search is 1132"
***RESULT IS THE SAME
Run time: 0.011 seconds
"Correct (size-numberCorrect):" QMap((10, 44))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"

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"-----END 44 from 60-----"
"-----START 45 from 60-----"
"input file number 45: inputName=C:/algo/h2/all2/U_2_0010_05_4.txt and
solutionName=C:/algo/h2/all2/SOL_U_2_05_0010_4.txt"
"***Data from file U_2_0010_05_4.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_2_05_0010_4.txt: machinesNum=5 jobsNum=10
lowerBound=782 upperBound=782 isOptimal=1"
Content of machines summed (782, 631, 665, 657, 684)
input selected: size 10 sum 3419
----Our Results-----
"tf=787. Machines:<782>,<631,103,36>,<629>,<369,279>,<245,185,160>"
"----Comparison for the 44 example----"
"***tf from benchmark was 787(we added the number of machines) and target function from
our bnb search is 787"
***RESULT IS THE SAME
Run time: 0.004 seconds
"Correct (size-numberCorrect):" QMap((10, 45))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 45 from 60-----"
"-----START 46 from 60-----"
"input file number 46: inputName=C:/algo/h2/all2/U_2_0010_05_5.txt and
solutionName=C:/algo/h2/all2/SOL_U_2_05_0010_5.txt"
"***Data from file U_2_0010_05_5.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_2_05_0010_5.txt: machinesNum=5 jobsNum=10
lowerBound=939 upperBound=939 isOptimal=1"
Content of machines summed (916, 902, 812, 798, 939)
input selected: size 10 sum 4367
----Our Results-----
"tf=944. Machines:<916,6>,<902>,<556,249,131>,<543,125>,<515,424>"
"----Comparison for the 45 example----"
"***tf from benchmark was 944(we added the number of machines) and target function from
our bnb search is 944"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 46))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 46 from 60-----"
"-----START 47 from 60-----"
"input file number 47: inputName=C:/algo/h2/all2/U_2_0010_05_6.txt and
solutionName=C:/algo/h2/all2/SOL_U_2_05_0010_6.txt"
"***Data from file U_2_0010_05_6.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_2_05_0010_6.txt: machinesNum=5 jobsNum=10
lowerBound=760 upperBound=760 isOptimal=1"
Content of machines summed (760, 608, 559, 539, 569)
input selected: size 10 sum 3035
----Our Results-----
"tf=765. Machines:<760>,<608,140>,<453,62,60,46,46>,<431>,<429>"
"----Comparison for the 46 example----"

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****tf from benchmark was 765(we added the number of machines) and target function from
our bnb search is 765"
***RESULT IS THE SAME
Run time: 0.004 seconds
"Correct (size-numberCorrect):" QMap((10, 47))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 47 from 60-----"
"-----START 48 from 60-----"
"input file number 48: inputName=C:/algo/h2/all2/U_2_0010_05_7.txt and
solutionName=C:/algo/h2/all2/SOL_U_2_05_0010_7.txt"
****Data from file U_2_0010_05_7.txt: machinesNum=5 jobsNum=10"
****SOLUTION Data from file SOL_U_2_05_0010_7.txt: machinesNum=5 jobsNum=10
lowerBound=1202 upperBound=1202 isOptimal=1"
Content of machines summed (1066, 1127, 1115, 1117, 1202)
input selected: size 10 sum 5627
----Our Results-----
"tf=1207. Machines:<950,195>,<932,116>,<798,317>,<637,480>,<624,578>"
"----Comparison for the 47 example----"
****tf from benchmark was 1207(we added the number of machines) and target function
from our bnb search is 1207"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 48))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 48 from 60-----"
"-----START 49 from 60-----"
"input file number 49: inputName=C:/algo/h2/all2/U_2_0010_05_8.txt and
solutionName=C:/algo/h2/all2/SOL_U_2_05_0010_8.txt"
****Data from file U_2_0010_05_8.txt: machinesNum=5 jobsNum=10"
****SOLUTION Data from file SOL_U_2_05_0010_8.txt: machinesNum=5 jobsNum=10
lowerBound=1390 upperBound=1390 isOptimal=1"
Content of machines summed (1112, 1390, 1307, 1316, 1240)
input selected: size 10 sum 6365
----Our Results-----
"tf=1395. Machines:<999,113>,<896,494>,<792,515>,<724,592>,<623,617>"
"----Comparison for the 48 example----"
****tf from benchmark was 1395(we added the number of machines) and target function
from our bnb search is 1395"
***RESULT IS THE SAME
Run time: 0.029 seconds
"Correct (size-numberCorrect):" QMap((10, 49))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 49 from 60-----"
"-----START 50 from 60-----"
"input file number 50: inputName=C:/algo/h2/all2/U_2_0010_05_9.txt and
solutionName=C:/algo/h2/all2/SOL_U_2_05_0010_9.txt"
****Data from file U_2_0010_05_9.txt: machinesNum=5 jobsNum=10"

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***SOLUTION Data from file SOL_U_2_05_0010_9.txt: machinesNum=5 jobsNum=10
lowerBound=1144 upperBound=1144 isOptimal=1"
Content of machines summed (957, 1018, 939, 1144, 1087)
input selected: size 10 sum 5145
----Our Results-----
"tf=1149. Machines:<858,193>,<841,177,99>,<746>,<728,416>,<622,465>"
"----Comparison for the 49 example----"
"***tf from benchmark was 1149(we added the number of machines) and target function
from our bnb search is 1149"
***RESULT IS THE SAME
Run time: 0.01 seconds
"Correct (size-numberCorrect):" QMap((10, 50))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 50 from 60-----"
"-----START 51 from 60-----"
"input file number 51: inputName=C:/algo/h2/all2/U_3_0010_05_0.txt and
solutionName=C:/algo/h2/all2/SOL_U_3_05_0010_0.txt"
"***Data from file U_3_0010_05_0.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_3_05_0010_0.txt: machinesNum=5 jobsNum=10
lowerBound=13547 upperBound=13547 isOptimal=1"
Content of machines summed (11493, 11553, 12900, 13547, 12550)
input selected: size 10 sum 62043
----Our Results-----
"tf=13552. Machines:<9731,2303>,<9250,1762>,<8593,4307>,<8377,5170>,<6957,5593>"
"----Comparison for the 50 example----"
"***tf from benchmark was 13552(we added the number of machines) and target function
from our bnb search is 13552"
***RESULT IS THE SAME
Run time: 0.011 seconds
"Correct (size-numberCorrect):" QMap((10, 51))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 51 from 60-----"
"-----START 52 from 60-----"
"input file number 52: inputName=C:/algo/h2/all2/U_3_0010_05_1.txt and
solutionName=C:/algo/h2/all2/SOL_U_3_05_0010_1.txt"
"***Data from file U_3_0010_05_1.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_3_05_0010_1.txt: machinesNum=5 jobsNum=10
lowerBound=12344 upperBound=12344 isOptimal=1"
Content of machines summed (10634, 12344, 11737, 11805, 11984)
input selected: size 10 sum 58504
----Our Results-----
"tf=12349. Machines:<8851,1783>,<8586,3758>,<7235,4502>,<6846,4959>,<6493,5491>"
"----Comparison for the 51 example----"
"***tf from benchmark was 12349(we added the number of machines) and target function
from our bnb search is 12349"
***RESULT IS THE SAME
Run time: 0.022 seconds
"Correct (size-numberCorrect):" QMap((10, 52))

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"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 52 from 60-----"
"-----START 53 from 60-----"
"input file number 53: inputName=C:/algo/h2/all2/U_3_0010_05_2.txt and
solutionName=C:/algo/h2/all2/SOL_U_3_05_0010_2.txt"
"***Data from file U_3_0010_05_2.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_3_05_0010_2.txt: machinesNum=5 jobsNum=10
lowerBound=10520 upperBound=10520 isOptimal=1"
Content of machines summed (9366, 9016, 8813, 8961, 10520)
input selected: size 10 sum 46676
----Our Results-----
"tf=10525. Machines:<8447,1486>,<7959,1188,1057>,<7625,919>,<7475>,<6696,3824>"
"----Comparison for the 52 example----"
"***tf from benchmark was 10525(we added the number of machines) and target function
from our bnb search is 10525"
***RESULT IS THE SAME
Run time: 0.009 seconds
"Correct (size-numberCorrect):" QMap((10, 53))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 53 from 60-----"
"-----START 54 from 60-----"
"input file number 54: inputName=C:/algo/h2/all2/U_3_0010_05_3.txt and
solutionName=C:/algo/h2/all2/SOL_U_3_05_0010_3.txt"
"***Data from file U_3_0010_05_3.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_3_05_0010_3.txt: machinesNum=5 jobsNum=10
lowerBound=8513 upperBound=8513 isOptimal=1"
Content of machines summed (8513, 7020, 7043, 6543, 8167)
input selected: size 10 sum 37286
----Our Results-----
"tf=8518. Machines:<8513>,<5858,1656,621>,<5107,1315,1162>,<4887>,<4096,4071>"
"----Comparison for the 53 example----"
"***tf from benchmark was 8518(we added the number of machines) and target function
from our bnb search is 8518"
***RESULT IS THE SAME
Run time: 0.004 seconds
"Correct (size-numberCorrect):" QMap((10, 54))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 54 from 60-----"
"-----START 55 from 60-----"
"input file number 55: inputName=C:/algo/h2/all2/U_3_0010_05_4.txt and
solutionName=C:/algo/h2/all2/SOL_U_3_05_0010_4.txt"
"***Data from file U_3_0010_05_4.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_3_05_0010_4.txt: machinesNum=5 jobsNum=10
lowerBound=10828 upperBound=10828 isOptimal=1"
Content of machines summed (9454, 10633, 10828, 10091, 10419)
input selected: size 10 sum 51425
----Our Results-----

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"tf=10833. Machines:<9454>,<8814,1819>,<7232,3596>,<5185,4906>,<3919,3784,2716>"
"----Comparison for the 54 example----"
"***tf from benchmark was 10833(we added the number of machines) and target function
from our bnb search is 10833"
***RESULT IS THE SAME
Run time: 0.018 seconds
"Correct (size-numberCorrect):" QMap((10, 55))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 55 from 60-----"
"-----START 56 from 60-----"
"input file number 56: inputName=C:/algo/h2/all2/U_3_0010_05_5.txt and
solutionName=C:/algo/h2/all2/SOL_U_3_05_0010_5.txt"
"***Data from file U_3_0010_05_5.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_3_05_0010_5.txt: machinesNum=5 jobsNum=10
lowerBound=11056 upperBound=11056 isOptimal=1"
Content of machines summed (10667, 10697, 8970, 9396, 11056)
input selected: size 10 sum 50786
----Our Results-----
"tf=11061. Machines:<8956,1711>,<8547,2295>,<6675,3036>,<6360,2150>,<6324,4732>"
"----Comparison for the 55 example----"
"***tf from benchmark was 11061(we added the number of machines) and target function
from our bnb search is 11061"
***RESULT IS THE SAME
Run time: 0.01 seconds
"Correct (size-numberCorrect):" QMap((10, 56))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 56 from 60-----"
"-----START 57 from 60-----"
"input file number 57: inputName=C:/algo/h2/all2/U_3_0010_05_6.txt and
solutionName=C:/algo/h2/all2/SOL_U_3_05_0010_6.txt"
"***Data from file U_3_0010_05_6.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_3_05_0010_6.txt: machinesNum=5 jobsNum=10
lowerBound=11575 upperBound=11575 isOptimal=1"
Content of machines summed (9943, 11426, 11575, 10166, 10923)
input selected: size 10 sum 54033
----Our Results-----
"tf=11580. Machines:<9943,1139>,<9621,1805>,<9580,1995>,<8070,2096>,<5665,4119>"
"----Comparison for the 56 example----"
"***tf from benchmark was 11580(we added the number of machines) and target function
from our bnb search is 11580"
***RESULT IS THE SAME
Run time: 0.012 seconds
"Correct (size-numberCorrect):" QMap((10, 57))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 57 from 60-----"
"-----START 58 from 60-----"

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"input file number 58: inputName=C:/algo/h2/all2/U_3_0010_05_7.txt and
solutionName=C:/algo/h2/all2/SOL_U_3_05_0010_7.txt"
"***Data from file U_3_0010_05_7.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_3_05_0010_7.txt: machinesNum=5 jobsNum=10
lowerBound=14233 upperBound=14233 isOptimal=1"
Content of machines summed (10016, 12162, 14233, 14098, 13379)
input selected: size 10 sum 63888
----Our Results-----
"tf=14238. Machines:<9965,2650,51>,<9512>,<8770,5463>,<7785,6313>,<6981,6398>"
"----Comparison for the 57 example----"
"***tf from benchmark was 14238(we added the number of machines) and target function
from our bnb search is 14238"
***RESULT IS THE SAME
Run time: 0.014 seconds
"Correct (size-numberCorrect):" QMap((10, 58))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 58 from 60-----"
"-----START 59 from 60-----"
"input file number 59: inputName=C:/algo/h2/all2/U_3_0010_05_8.txt and
solutionName=C:/algo/h2/all2/SOL_U_3_05_0010_8.txt"
"***Data from file U_3_0010_05_8.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_3_05_0010_8.txt: machinesNum=5 jobsNum=10
lowerBound=12749 upperBound=12749 isOptimal=1"
Content of machines summed (9968, 10246, 12749, 12417, 12614)
input selected: size 10 sum 57994
----Our Results-----
"tf=12754. Machines:<9347,910,621>,<9336>,<8314,4435>,<7863,4554>,<7643,4971>"
"----Comparison for the 58 example----"
"***tf from benchmark was 12754(we added the number of machines) and target function
from our bnb search is 12754"
***RESULT IS THE SAME
Run time: 0.011 seconds
"Correct (size-numberCorrect):" QMap((10, 59))
"Mistakes(size-numberMistakes):" QMap()
"Avegare error: 0"
"-----END 59 from 60-----"
"-----START 60 from 60-----"
"input file number 60: inputName=C:/algo/h2/all2/U_3_0010_05_9.txt and
solutionName=C:/algo/h2/all2/SOL_U_3_05_0010_9.txt"
"***Data from file U_3_0010_05_9.txt: machinesNum=5 jobsNum=10"
"***SOLUTION Data from file SOL_U_3_05_0010_9.txt: machinesNum=5 jobsNum=10
lowerBound=13586 upperBound=13586 isOptimal=1"
Content of machines summed (10223, 10781, 10468, 12897, 13586)
input selected: size 10 sum 57955
----Our Results-----
"tf=13591. Machines:<9743,1376,1050,480>,<9731>,<9092>,<8389,4508>,<7662,5924>"
"----Comparison for the 59 example----"
"***tf from benchmark was 13591(we added the number of machines) and target function
from our bnb search is 13591"

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***RESULT IS THE SAME

Run time: 0.009 seconds

"Correct (size-numberCorrect):" QMap((10, 60))

"Mistakes(size-numberMistakes):" QMap()

"Avegare error: 0"

"-----END 60 from 60-----"

"Correct (size-numberCorrect):" QMap((10, 60))

"Mistakes(size-numberMistakes):" QMap()

"Total Avegare error: 0"

"Total time: 0.874 seconds"