ניתוח ארבעת הקלטים שהניבו את הטעות הכי גדולה (4,3,3,3) מתוך .130

הקלט הראשון– ערך שגיאה 4(אינדקס 7 בדוח 2) – <mark>אין חידוש לעומת הדוח</mark> <mark>הקודם(מגיעים לאופטימום)- לכן הוסר מהדוח הזה להוריד מהעומס</mark> U_1_0010_05_6.txt

ל מכונות, 10 משימות

Content of machines summed (113, 113, 108, 92, 83)

Content of machines ((67, 46), (40, 39, 34), (93, 10, 5), (92), (83))

• פונקציית המטרה 118 (תזכורת: הוספנו את מספר המכונות)

END ----- bestSolutionFound for alg sameMachine found:

target function = 118, num of machines=5

machines content:

bucket1 sum:93, content= (83, 10)

bucket2 sum:93, content= (93)

bucket3 sum:97, content= (92, 5)

bucket4 sum:113, content= (40, 34, 39)

bucket5 sum:113, content= (67, 46)

הקלט השני- ערך שגיאה 3 (אינדקס 34 בדוח 2) - מגיעים לאופטימום לאחר תיקון הבאג U_1_0050_25_3.txt

- נציג את הפתרון הסופי המלא רק של BEST FIT
 - 25 מכונות, 50 משימות
- Content of machines summed (109, 108, 110, 100, 92, 110, 110, 90, 90, 108, 108, 110, 110, 110, 110, 110, 107, 103, 107, 110, 109, 107, 108, 110, 111)
 - פונקציית המטרה 136 (תזכורת: הוספנו את מספר המכונות)
 - מוצא את האופטימום BEST FIT •

• Lpt 139

END ----- bestSolutionFound for alg LPT found: target function = 139, num of machines=25, lms=282665

Same machine 137

END ----- bestSolutionFound for alg SameMachine found: target function = 137, num of machines=25, lms=282613

BestFit – OPT 136

END ----- bestSolutionFound for alg BESTFIT found: target function = 136, num of machines=25, lms=282621 machines content:

bucket1 sum:99, content= (99)

bucket2 sum:103, content= (94, 9)

bucket3 sum:101, content= (91, 10)

bucket4 sum:102, content= (92, 10)

bucket5 sum:102, content= (92, 10)

bucket6 sum:107, content= (91, 16)

bucket7 sum:106, content= (98, 8)

bucket8 sum:109, content= (80, 29)

bucket9 sum:109, content= (90, 19)

bucket10 sum:109, content= (90, 19)

bucket11 sum:109, content= (79, 30)

bucket12 sum:108, content= (84, 24)

bucket13 sum:108, content= (84, 24)

bucket14 sum:110, content= (82, 28)

```
bucket15 sum:106, content= (75, 31)
```

הקלט השלישי— ערך שגיאה 3 (אינדקס 66 בדוח 2) מגיעים לאופטימום לאחר תיקון הבאג $U_1_0100 = 0.5$

- 25 מכונות, 100 משימות
- - פונקציית המטרה 244 (תזכורת: הוספנו את מספר המכונות) –
 LPT נראה רק את
 - כל שלושת הפתרונות ההתחלתיים מגיעים לאופטימום 💿
- Same machine

END ----- bestSolutionFound for alg SameMachine found: target function = 244, num of machines=25

BestFit

END ----- bestSolutionFound for alg BESTFIT found: target function = 244, num of machines=25

Lpt 139

END ----- bestSolutionFound for alg LPT found: target function = 244, num of machines=25 machines content: bucket1 sum:218, content= (98, 60, 40, 20)

bucket2 sum:219, content= (92, 58, 48, 21)

bucket3 sum:218, content= (94, 57, 45, 22)

bucket4 sum:219, content= (91, 55, 54, 19)

bucket5 sum:219, content= (96, 58, 51, 14)

bucket6 sum:218, content= (93, 55, 47, 23)

bucket7 sum:219, content= (96, 57, 66)

bucket8 sum:218, content= (96, 53, 45, 24)

bucket9 sum:219, content= (87, 68, 40, 24)

bucket10 sum:219, content= (87, 64, 44, 24)

bucket11 sum:218, content= (86, 62, 53, 17)

bucket12 sum:218, content= (86, 64, 52, 16)

```
bucket13 sum:218, content= (82, 54, 54, 28)
```

הקלט הרביעי– ערך שגיאה 3 (אינדקס 70 בדוח 2) עדיין אין אופטימום אך שיפרנו מערך טעות 3 לערך טעות 1 לאחר תיקון הבאג

U_1_0100_25_9.txt

- 25 מכונות, 100 משימות
- - פונקציית המטרה 228 (תזכורת: הוספנו את מספר המכונות)
 - אנחנו השגנו 229 כל השלושה הגיעו ל229
 - נראה את הפתרונות הסופיים של כולם

LPT

```
END ----- bestSolutionFound for alg LPT found:
target function = 229, num of machines=25, lms=1.02822e+06
machines content:
bucket1 sum:202, content= (99, 68, 35)
bucket2 sum:202, content= (95, 58, 38, 11)
bucket3 sum:202, content= (98, 56, 35, 13)
bucket4 sum:201, content= (99, 61, 38, 3)
bucket5 sum:201, content= (98, 54, 46, 3)
bucket6 sum:202, content= (96, 54, 44, 8)
bucket7 sum:202, content= (97, 52, 45, 8)
bucket8 sum:203, content= (97, 53, 45, 8)
bucket9 sum: 202, content= (98, 54, 46, 4)
bucket10 sum:203, content= (94, 52, 44, 13)
bucket11 sum:201, content= (99, 54, 48)
bucket12 sum:202, content= (91, 69, 34, 7, 1)
bucket13 sum:202, content= (91, 70, 32, 9)
bucket14 sum:204, content= (89, 60, 31, 24)
bucket15 sum:204, content= (87, 68, 30, 19)
bucket16 sum:203, content= (87, 69, 29, 18)
bucket17 sum:204, content= (86, 68, 28, 22)
bucket18 sum:204, content= (85, 67, 28, 24)
```

bucket19 sum:204, content= (84, 68, 27, 25)

```
bucket20 sum:204, content= (82, 74, 26, 22)
bucket21 sum:204, content= (82, 75, 27, 20)
bucket22 sum:203, content= (82, 75, 26, 20)
bucket23 sum:204, content= (82, 75, 26, 21)
bucket24 sum:204, content= (82, 74, 29, 19)
bucket25 sum:203, content= (80, 77, 25, 12, 9)
   • Best fit
END ----- bestSolutionFound for alg BESTFIT found:
target function = 229, num of machines=25, lms=1.02821e+06
machines content:
bucket1 sum:202, content= (99, 99, 4)
bucket2 sum:204, content= (98, 98, 8)
bucket3 sum:204, content= (99, 98, 7)
bucket4 sum:203, content= (97, 97, 9)
bucket5 sum:203, content= (96, 95, 12)
bucket6 sum:203, content= (94, 91, 18)
bucket7 sum:204, content= (91, 89, 24)
bucket8 sum:203, content= (87, 87, 29)
bucket9 sum:202, content= (86, 84, 32)
bucket10 sum:202, content= (85, 82, 35)
bucket11 sum:202, content= (82, 82, 38)
bucket12 sum:202, content= (82, 82, 38)
bucket13 sum:203, content= (80, 77, 46)
bucket14 sum:203, content= (75, 75, 53)
bucket15 sum:203, content= (75, 74, 54)
bucket16 sum:203, content= (74, 69, 60)
bucket17 sum:201, content= (70, 69, 61, 1)
bucket18 sum:203, content= (68, 68, 67)
bucket19 sum:203, content= (68, 68, 58, 9)
bucket20 sum:202, content= (56, 54, 54, 35, 3)
bucket21 sum:203, content= (54, 52, 52, 45)
bucket22 sum:203, content= (48, 46, 45, 44, 20)
bucket23 sum:202, content= (44, 34, 31, 28, 29, 28, 8)
bucket24 sum:203, content= (30, 27, 27, 26, 26, 26, 25, 13, 3)
```

bucket25 sum:204, content= (25, 22, 24, 22, 21, 20, 19, 19, 13, 11, 8)

Same machine

```
END ----- bestSolutionFound for alg SameMachine found:
target function = 229, num of machines=25, lms=1.02822e+06
machines content:
bucket1 sum:203, content= (21, 28, 26, 29, 18, 13, 13, 12, 11, 9, 7, 8,
8)
bucket2 sum:201, content= (3, 99, 54, 45)
bucket3 sum:202, content= (98, 58, 46)
bucket4 sum:203, content= (98, 53, 52)
bucket5 sum:201, content= (99, 56, 46)
bucket6 sum:203, content= (97, 54, 52)
bucket7 sum:201, content= (99, 54, 48)
bucket8 sum:204, content= (97, 69, 38)
bucket9 sum:203, content= (98, 60, 45)
bucket10 sum:203, content= (96, 61, 35, 8, 3)
bucket11 sum:203, content= (95, 54, 27, 27)
bucket12 sum:204, content= (91, 68, 26, 19)
bucket13 sum:203, content= (91, 68, 19, 25)
bucket14 sum:204, content= (82, 68, 29, 25)
bucket15 sum:202, content= (87, 80, 35)
bucket16 sum:204, content= (86, 74, 44)
bucket17 sum:203, content= (89, 70, 44)
bucket18 sum:201, content= (87, 75, 38, 1)
bucket19 sum:203, content= (85, 74, 20, 24)
bucket20 sum:203, content= (84, 67, 30, 22)
bucket21 sum:203, content= (82, 77, 20, 24)
bucket22 sum:204, content= (82, 68, 28, 26)
bucket23 sum:203, content= (94, 75, 34)
bucket24 sum:202, content= (82, 75, 32, 9, 4)
bucket25 sum:204, content= (82, 69, 31, 22)
```