#### Экспериментальное исследование:

Тесты из папки Ftests (малый объем вх. Данных для BF):

## inputF0.xml (1):

GA: WCRT = 55487Time = 0.19 c Task num = 1BS = 25000

AI: WCRT = 55487 Time = 1.89 c Task num = 1 BS = 25000

BF: WCRT = 55487 Time = 184 c Task num = 1 BS = 25000

STBA: WCRT = 55487 Time = < 0.1 c Task num = 1 BS = 25000

## inputF2.xml (20):

GA: WCRT = 3374 Time = 0.851 c Task num = 20 BS = 2000

AI: WCRT = 3374Time = 2.512 c Task num = 20BS = 2000

WCRT BF: 3374

Time: 295.3173851966858

Task number: 20 WCRT BS: 2000

STBA: WCRT = 3374 Time = < 0.1 c Task num = 20 BS = 2000

## inputF2.xml (23):

WCRT GA: 4117

Time: 0.8250479698181152 solution: {9: 9, 22: 1220}

Task number: 23 WCRT BS: 2000

WCRT AI: 4117

Time: 2.663289785385132 solution: {9: 49, 22: 155}

Task number: 23 WCRT BS: 2000

WCRT BF: 4117

Time: 1868.3928437232971

Task number: 23 WCRT BS: 2000

WCRT STBA: 4117

Time: < 0.1 c Task number: 23 WCRT BS: 2000

### inputF3.xml (2):

WCRT GA: 40

Time: 2.027984142303467

solution: {0: 6, 14: 3, 9: 4, 11: 3, 13: 4, 15: 7}

Task number: 2 WCRT BS: 30

WCRT AI: 40

Time: 2.6841490268707275

solution: {0: 4, 14: 1, 9: 9, 11: 4, 13: 6, 15: 7}

Task number: 2 WCRT BS: 30

WCRT STBA: 40 Time: < 0.1 c Task number: 2 WCRT BS: 30

## <u>inputF3.xml (17):</u>

WCRT GA: 21731

Time: 0.2962799072265625

solution: {16: 11114} Task number: 17 WCRT BS: 15000

WCRT AI: 21731

Time: 3.0326409339904785

solution: {16: 9483} Task number: 17 WCRT BS: 15000

WCRT STBA: 21731

Time: < 0.1 c Task number: 17 WCRT BS: 15000

## inputF3.xml (23):

WCRT GA: 6149

Time: 1.1328351497650146 solution: {8: 10, 7: 4, 22: 919}

Task number: 23 WCRT BS: 2500

WCRT AI: 6149

Time: 2.9423186779022217 solution: {8: 3, 7: 2, 22: 1062}

Task number: 23 WCRT BS: 2500

WCRT STBA: 6149

## example5.xml (4):

WCRT GA: 35

Time: 0.12004399299621582

solution: {0: 20, 2: 5} Task number: 4 WCRT BS: 35

WCRT AI: 35

Time: 2.179131031036377 solution: {0: 13, 2: 5}
Task number: 4

WCRT BS: 35

WCRT BF: 35

Time: 0.14746499061584473

Task number: 4 WCRT BS: 35

WCRT STBA: 40

Time: < 0.1 Task number: 4 WCRT BS: 35

## example5.xml (3):

WCRT GA: 25

Time: 0.11881184577941895

solution: {0: 10} Task number: 3 WCRT BS: 20

WCRT AI: 25

Time: 2.168523073196411

solution: {0: 5} Task number: 3 WCRT BS: 20

WCRT BF: 25

Time: 0.13680100440979004

Task number: 3 WCRT BS: 20

WCRT STBA: 25

## exampleBF.xml (7):

WCRT GA: 841

Time: 0.9697530269622803

Task number: 7 WCRT BS: 841

WCRT AI: 841

Time: 2.2846078872680664

Task number: 7 WCRT BS: 841

WCRT BF: 841

Time: 18.220462799072266

Task number: 7 WCRT BS: 841

WCRT STBA: 846

Time: < 0.1 Task number: 7 WCRT BS: 841

## Тесты из папки tests (большой объем вх. данных не для BF!):

## inputBFAR1-46.xml

## inputBFAR1-46.xml (120):

WCRT GA: 4820

Time: 23.126538038253784

Task number: 120 WCRT BS: 4820

WCRT AI: 4820

Time: 25.78711771965027

Task number: 120 WCRT BS: 4820

WCRT STBA: 4921

Time: < 0.1

Task number: 120 WCRT BS: 4820

## **inputBFAR1-46.xml** (150):

WCRT GA: 5267

Time: 22.59195899963379

Task number: 150 WCRT BS: 5267

WCRT AI: 5267

Time: 25.363354206085205

Task number: 150 WCRT BS: 5267

WCRT STBA: 5323

Time: < 0.1

Task number: 150 WCRT BS: 5267

### inputBFAR1-46.xml (46):

WCRT GA: 5780

Time: 60.296382904052734

Task number: 46 WCRT BS: 5529

WCRT AI: 5529

Time: 26.015167951583862

Task number: 46 WCRT BS: 5529

WCRT STBA: 6191

Time: < 0.1

Task number: 46 WCRT BS: 5529

## **inputBFAR1-46.xml** (142):

WCRT GA: 4814

Time: 23.026723861694336

Task number: 142 WCRT BS: 4814

WCRT STBA: 5019

Time: < 0.1

Task number: 142 WCRT BS: 4814

### inputBFAR1-46.xml (136):

WCRT GA: 4668

Time: 24.389115810394287

Task number: 136 WCRT BS: 4668

WCRT STBA: 5288

Time: < 0.1

Task number: 136 WCRT BS: 4668

## inputBFAR2-80.xml

### File name: inputBFAR2-80.xml (80):

WCRT GA: 95237

Time: 10.038002967834473

Task number: 80 WCRT BS: 81891

WCRT AI: 93650

Time: 12.297904014587402

Task number: 80 WCRT BS: 81891

WCRT STBA: 95237

Time: < 0.1 Task number: 80 WCRT BS: 81891

### File name: inputBFAR2-80.xml (82):

WCRT GA: 154977

Time: 17.70329213142395

Task number: 82 WCRT BS: 142776

WCRT STBA: 154977

File name: inputBFAR2-80.xml (58):

WCRT GA: 39122

Time: 7.756683826446533

Task number: 58 WCRT BS: 39122

WCRT STBA: 56680

Time: < 0.1 Task number: 58 WCRT BS: 39122

File name: inputBFAR2-80.xml (56):

WCRT GA: 92098

Time: 7.661808967590332

Task number: 56 WCRT BS: 92098

WCRT STBA: 113296

Time: < 0.1 Task number: 56 WCRT BS:

File name: inputBFAR2-80.xml (22):

WCRT GA: 99778

Time: 13.232372999191284

Task number: 22 WCRT BS: 77643

WCRT STBA: 107389

## inputBFAR3-139.xml

### File name: inputBFAR3-139.xml (139)

WCRT GA: 6789

Time: 66.39482402801514

solution: {0: 200, 1: 850, 2: 820, 130: 15, 132: 20, 133: 105, 134: 17, 3: 80, 4: 77, 5: 42, 138: 30, 11: 1070, 13: 490, 140: 35, 6: 23, 7: 77, 8: 58, 146: 11, 147: 68, 148: 11, 149: 35, 150: 530, 152:

82, 153: 113, 17: 18, 9: 51, 10: 79, 12: 45, 14: 57, 15: 36, 16: 44, 120: 83, 126: 12}

Task number: 139 WCRT BS: 6289

WCRT AI: 6289

Time: 26.245330810546875

solution: {0: 148, 1: 672, 2: 416, 130: 14, 132: 15, 133: 95, 134: 15, 3: 69, 4: 73, 5: 36, 138: 28, 11: 738, 13: 397, 140: 31, 6: 19, 7: 64, 8: 51, 146: 7, 147: 61, 148: 12, 149: 38, 150: 3847, 152:

86, 153: 831, 17: 17, 9: 44, 10: 73, 12: 37, 14: 56, 15: 41, 16: 38, 120: 8, 126: 15}

Task number: 139 WCRT BS: 6289

WCRT STBA: 6789

Time: < 0.1

Task number: 139 WCRT BS: 6289

### File name: inputBFAR3-139.xml (154):

WCRT GA: 10779

Time: 25.667410850524902

Task number: 154 WCRT BS: 10779

**WCRT STBA: 10889** 

Time: < 0.1

Task number: 154 WCRT BS: 10779

### File name: inputBFAR3-139.xml (149):

WCRT GA: 5200

Time: 80.43648195266724

Task number: 149 WCRT BS: 4674

WCRT STBA: 5214

Time: < 0.1

Task number: 149

WCRT BS:

File name: inputBFAR3-139.xml (45):

WCRT GA: 4598

Time: 47.716087102890015

Task number: 45 WCRT BS: 4517

WCRT STBA: 5009

Time: < 0.1 Task number: 45 WCRT BS:

File name: inputBFAR3-139.xml (21):

WCRT GA: 6336

Time: 24.619912147521973

Task number: 21 WCRT BS: 6336

WCRT STBA: 6689

Time: < 0.1 Task number: 21 WCRT BS:

## inputBFAR4-63.xml

File name: inputBFAR4-63.xml (63):

WCRT GA: 110363

Time: 21.309957027435303

Task number: 63 WCRT BS: 96028

WCRT AI: 96028

Time: 8.889918088912964

Task number: 63 WCRT BS: 96028

WCRT STBA: 113586

Time: < 0.1 Task number: 63 WCRT BS: 96028

### File name: inputBFAR4-63.xml (82):

WCRT GA: 174356

Time: 9.170708894729614

Task number: 82 WCRT BS: 174356

WCRT STBA: 174356

Time: < 0.1 Task number: 82 WCRT BS:

File name: inputBFAR4-63.xml (49):

WCRT GA: 103680

Time: 8.137722969055176

Task number: 49 WCRT BS: 103680

WCRT STBA: 120296

Time: < 0.1 Task number: 49 WCRT BS:

File name: inputBFAR4-63.xml (22):

WCRT GA: 100582

Time: 19.65021586418152

Task number: 22 WCRT BS: 77643

WCRT STBA: 107389

Time: < 0.1 Task number: 22

#### WCRT BS:

### File name: inputBFAR4-63.xml (16):

WCRT GA: 92472

Time: 7.6277172565460205

Task number: 16 WCRT BS: 92472

WCRT STBA: 92472

Time: < 0.1 Task number: 16 WCRT BS:

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## File name: inputBFAR5-59.xml:

WCRT GA: 2031

Time: 10.053084135055542

solution: {0: 214, 1: 106, 2: 10, 3: 292, 4: 222, 5: 36, 6: 256, 7: 6, 8: 318, 9: 150, 10: 234, 13:

220, 15: 18, 51: 16, 52: 44, 53: 35, 54: 18, 55: 51}

Task number: 59 WCRT BS: 1669

**WCRT AI: 1778** 

Time: 19.026404857635498

solution: {0: 46, 1: 54, 2: 6, 3: 196, 4: 69, 5: 18, 6: 181, 7: 2, 8: 148, 9: 11, 10: 149, 13: 26, 15:

32, 51: 94, 52: 32, 53: 184, 54: 52, 55: 47}

Task number: 59 WCRT BS: 1669

WCRT STBA: 2031

Time: < 0.1 Task number: 59 WCRT BS: 1669

#### File name: inputBFAR6-44.xml:

WCRT GA: 3131

Time: 13.611641645431519

Task number: 44 WCRT BS: 2793

WCRT AI: 2793

Time: 7.925335884094238

Task number: 44 WCRT BS: 2793

WCRT STBA: 3131

Time: < 0.1 Task number: 44 WCRT BS: 2793

File name: inputBFAR7-24.xml:

WCRT GA: 3709

Time: 12.173167705535889

solution: {0: 334, 1: 162, 2: 228, 3: 316, 4: 132, 5: 334, 6: 346, 7: 216, 8: 258, 12: 60, 13: 72, 14: 104, 15: 66, 16: 254, 17: 256, 18: 320, 19: 126, 21: 96, 22: 132, 25: 234, 26: 130, 27: 70, 28: 138, 29: 64, 31: 110, 32: 198, 33: 226, 34: 100, 35: 2, 36: 104, 38: 328, 39: 18, 41: 304, 42: 342, 43: 284, 44: 202, 48: 338, 49: 82, 50: 46, 51: 106, 52: 174, 53: 40, 54: 82, 57: 316, 58: 1, 59: 314, 60: 336, 61: 2, 62: 163, 63: 166, 64: 19, 65: 17, 66: 11, 67: 1, 69: 240, 70: 290, 71: 14, 72:

76, 73: 66}
Task number: 24

WCRT BS: 3403

**WCRT AI: 3403** 

Time: 7.799712896347046

solution: {0: 100, 1: 127, 2: 22, 3: 189, 4: 33, 5: 86, 6: 93, 7: 135, 8: 20, 12: 23, 13: 43, 14: 78, 15: 31, 16: 47, 17: 92, 18: 177, 19: 89, 21: 30, 22: 22, 25: 156, 26: 77, 27: 6, 28: 38, 29: 50, 31: 76, 32: 97, 33: 52, 34: 72, 35: 1, 36: 66, 38: 221, 39: 4, 41: 193, 42: 262, 43: 219, 44: 121, 48: 320, 49: 41, 50: 8, 51: 109, 52: 47, 53: 26, 54: 41, 57: 203, 58: 1, 59: 318, 60: 180, 61: 6, 62:

115, 63: 132, 64: 27, 65: 45, 66: 24, 67: 3, 69: 126, 70: 58, 71: 14, 72: 62, 73: 8}

Task number: 24 WCRT BS: 3403

WCRT STBA: 4050

Time: < 0.1 Task number: 24 WCRT BS: 3403

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## inputBKBO1-84.xml

File name: inputBKBO1-84.xml (63):

WCRT GA: 2133

Time: 6.28045392036438

Task number: 63 WCRT BS: 2133

WCRT AI: 2133

Time: 7.976863145828247

Task number: 63 WCRT BS: 2133

WCRT STBA: 2157

Time: < 0.1 Task number: 63 WCRT BS: 2133

File name: inputBKBO1-84.xml (89):

WCRT GA: 1067

Time: 114.57555294036865

Task number: 89 WCRT BS: 680

WCRT STBA: 1845

Time: < 0.1 Task number: 89 WCRT BS:

## File name: inputBKBO1-84.xml (71):

WCRT GA: 1211

Time: 68.50464510917664

Task number: 71 WCRT BS: 1047

WCRT STBA: 1211

Time: < 0.1 Task number: 71 WCRT BS:

File name: inputBKBO1-84.xml (48):

WCRT GA: 1494

Time: 119.18279027938843

Task number: 48 WCRT BS: 1471

WCRT STBA: 2481 НЕ ПЛАНИРУЕМА

File name: inputBKBO1-84.xml (42):

WCRT GA: 1414

Time: 86.51061201095581

Task number: 42 WCRT BS: 937

WCRT STBA: 2403 НЕ ПЛАНИРУЕМА

Time: < 0.1 Task number: 42 WCRT BS:

# inputBKBO2-44.xml:

## File name: inputBKBO2-44.xml (44):

WCRT GA: 1034

Time: 18.060410261154175

Task number: 44 WCRT BS: 778

WCRT AI: 1007

Time: 18.484649181365967

Task number: 44 WCRT BS: 778

WCRT STBA: 1034

Time: < 0.1 Task number: 44 WCRT BS: 778

File name: inputBKBO2-44.xml (47):

WCRT GA: 1692

Time: 22.7392361164093

Task number: 47 WCRT BS: 1386

WCRT STBA: 1980

File name: inputBKBO2-44.xml (32):

WCRT GA: 1518

Time: 52.58738589286804

Task number: 32 WCRT BS: 770

WCRT STBA: 1654

Time: < 0.1 Task number: WCRT BS:

File name: inputBKBO2-44.xml (19):

WCRT GA: 1238

Time: 9.992424964904785

Task number: 19 WCRT BS: 982

WCRT STBA: 1494

Time: < 0.1 Task number: WCRT BS:

## File name: inputBKBO2-44.xml (13):

WCRT GA: 2626

Time: 11.096112966537476

Task number: 13 WCRT BS: 2626

WCRT STBA: 2694

Time: < 0.1 Task number: WCRT BS:

# inputBKBO3-54.xml:

File name: inputBKBO3-54.xml (54):

WCRT GA: 1359

Time: 13.689386129379272

Task number: 54 WCRT BS: 1103

WCRT AI: 1242

Time: 32.64876079559326

Task number: 54 WCRT BS: 1103

WCRT STBA: 1615

Time: < 0.1 Task number: 54 WCRT BS: 1103

File name: inputBKBO3-54.xml (47):

WCRT GA: 1692

Time: 14.925007104873657

Task number: 47 WCRT BS: 1386

WCRT STBA: 1980

Time: < 0.1 Task number: WCRT BS:

File name: inputBKBO3-54.xml (32):

WCRT GA: 1538

Time: 40.570836782455444

Task number: 32 WCRT BS: 770

WCRT STBA: 1654

Time: < 0.1 Task number: WCRT BS:

File name: inputBKBO3-54.xml (17):

WCRT GA: 2006

Time: 9.832705736160278

Task number: 17 WCRT BS: 2006

WCRT STBA: 2216

File name: inputBKBO3-54.xml (0):

WCRT GA: 2685

Time: 10.877899169921875

Task number: 0 WCRT BS: 2685

WCRT STBA: 2889

Time: < 0.1 Task number: WCRT BS:

# inputBKBO4-35.xml

## File name: inputBKBO4-35.xml (35):

**WCRT GA: 488** 

Time: 5.877738952636719

Task number: 35 WCRT BS: 358

WCRT AI: 488

Time: 9.17054009437561

Task number: 35 WCRT BS: 358

WCRT STBA: 488

Time: < 0.1 Task number: 35 WCRT BS: 358

### File name: inputBKBO4-35.xml (28):

**WCRT GA: 876** 

Time: 9.262653827667236

Task number: 28 WCRT BS: 688

WCRT STBA: 876

### File name: inputBKBO4-35.xml (17):

WCRT GA: 844

Time: 6.1923089027404785

Task number: 17 WCRT BS: 128

WCRT STBA: 844

Time: < 0.1 Task number: WCRT BS:

File name: inputBKBO4-35.xml (7):

WCRT GA: 1697

Time: 6.491134881973267

Task number: 7 WCRT BS: 1697

WCRT STBA: 1697

Time: < 0.1 Task number: WCRT BS:

File name: inputBKBO4-35.xml (2):

WCRT GA: 2221

Time: 5.835181951522827

Task number: 2 WCRT BS: 2221

WCRT STBA: 2233

Time: < 0.1 Task number: WCRT BS:

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File name: inputBKBO5-23.xml

WCRT GA: 840

Time: 22.871401071548462

Task number: 23 WCRT BS: 702

WCRT AI: 734

Time: 26.831416130065918

Task number: 23 WCRT BS: 702

WCRT STBA: 957

Time: < 0.1 Task number: 23 WCRT BS: 702

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# inputBTREE1-124.xml

File name: inputBTREE1-124.xml (124):

WCRT GA: 4176

Time: 83.85563015937805

Task number: 124 WCRT BS: 4000

WCRT AI: 4176

Time: 88.61565828323364

Task number: 124 WCRT BS: 4000

WCRT STBA: 5176

Time: < 0.1

Task number: 124 WCRT BS: 4000

## File name: inputBTREE1-124.xml (125):

WCRT GA: 6077

Time: 11.140254020690918

Task number: 125 WCRT BS: 6077

WCRT STBA: 6077

### File name: inputBTREE1-124.xml (102):

WCRT GA: 4553

Time: 10.592670917510986

Task number: 102 WCRT BS: 4553

WCRT STBA: 4553

Time: < 0.1 Task number: WCRT BS:

### File name: inputBTREE1-124.xml (82):

WCRT GA: 7595

Time: 10.444447040557861

Task number: 82 WCRT BS: 7595

WCRT STBA: 7595

Time: < 0.1 Task number: WCRT BS:

## File name: inputBTREE1-124.xml (74):

WCRT GA: 3961

Time: 10.918224811553955

Task number: 74 WCRT BS: 3961

WCRT STBA: 3961

Time: < 0.1 Task number: WCRT BS:

## inputBTREE2-102.xml

### File name: inputBTREE2-102.xml (102):

WCRT GA: 7379

Time: 87.30036234855652

Task number: 102 WCRT BS: 7094

WCRT AI: 7094

Time: 87.07986092567444

Task number: 102 WCRT BS: 7094

WCRT STBA: 7379

Time:< 0.1

Task number: 102 WCRT BS: 7094

## File name: inputBTREE2-102.xml (125):

WCRT GA: 6077

Time: 10.50087594985962

Task number: 125 WCRT BS: 6077

WCRT STBA: 6077

Time: < 0.1 Task number: WCRT BS:

#### File name: inputBTREE2-102.xml (92):

WCRT GA: 10547

Time: 12.492815971374512

Task number: 92 WCRT BS: 10547

WCRT STBA: 10547

Time: < 0.1 Task number: WCRT BS:

### File name: inputBTREE2-102.xml (74):

WCRT GA: 3961

Time: 11.501235008239746

Task number: 74 WCRT BS: 3961

WCRT STBA: 3961

## File name: inputBTREE2-102.xml (59):

WCRT GA: 6310

Time: 12.088633298873901

Task number: 59 WCRT BS: 6310

WCRT STBA: 6310

Time: < 0.1 Task number: WCRT BS:

# inputBTREE3-61.xml

## File name: inputBTREE3-61.xml (61):

WCRT GA: 3061

Time: 50.352104902267456

Task number: 61 WCRT BS: 1007

WCRT AI: 3061

Time: 39.376590728759766

Task number: 61 WCRT BS: 1007

WCRT STBA: 3061

Time: < 0.1 Task number: 61 WCRT BS: 1007

File name: inputBTREE3-61.xml (73):

WCRT GA: 949

Time: 3.760861873626709

Task number: 73 WCRT BS: 949

WCRT STBA: 1038

File name: inputBTREE3-61.xml (58):

WCRT GA: 3955

Time: 12.07753300666809

Task number: 58 WCRT BS: 3590

WCRT STBA: 4706

Time: < 0.1 Task number: WCRT BS:

File name: inputBTREE3-61.xml (50):

WCRT GA: 5567

Time: 5.957879066467285

Task number: 50 WCRT BS: 5567

WCRT STBA: 6213

Time: < 0.1 Task number: WCRT BS:

File name: inputBTREE3-61.xml (26):

WCRT GA: 5323

Time: 5.967849254608154

Task number: 26 WCRT BS: 4724

WCRT STBA: 6011

Time: < 0.1 Task number: WCRT BS:

# inputBTREE4-40.xml

### File name: inputBTREE4-40.xml (40):

WCRT GA: 5526

Time: 32.55065703392029

Task number: 40 WCRT BS: 3657

WCRT AI: 5526

Time: 34.299996852874756

Task number: 40

WCRT BS: 3657

WCRT STBA: 5526

Time: < 0.1 Task number: 40 WCRT BS: 3657

File name: inputBTREE4-40.xml (58):

WCRT GA: 3956

Time: 14.254830837249756

Task number: 58 WCRT BS: 3590

WCRT STBA: 4706

Time: < 0.1 Task number: WCRT BS:

File name: inputBTREE4-40.xml (50):

WCRT GA: 5567

Time: 4.477806806564331

Task number: 50 WCRT BS: 5567

WCRT STBA: 6213

Time: < 0.1 Task number: WCRT BS:

## File name: inputBTREE4-40.xml (34):

WCRT GA: 3989

Time: 5.964279890060425

Task number: 34 WCRT BS: 3390

WCRT STBA: 4078

## File name: inputBTREE4-40.xml (14):

WCRT GA: 9429

Time: 7.944177150726318

Task number: 14 WCRT BS: 9415

WCRT STBA: 9459

Time: < 0.1 Task number: WCRT BS:

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## File name: inputBTREE5-8.xml:

WCRT GA: 8641

Time: 43.99531388282776

Task number: 8 WCRT BS: 8627

WCRT AI: 8627

Time: 34.282429933547974

Task number: 8 WCRT BS: 8627

WCRT STBA: 8671

Time: < 0.1 Task number: 8 WCRT BS: 8627

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### **REAL DATA (152):**

WCRT GA: 1428

Time: 28.867911338806152 solution: {38: 342, 39: 145}

Task number: 152 WCRT BS: 1428

WCRT AI: 1428

Time: 303.74654173851013 solution: {38: 120, 39: 145}

Task number: 152 WCRT BS: 1428

WCRT STBA: 1428

Time: 3.18

Task number: 152 WCRT BS: 1428

#### **REAL DATA (161):**

WCRT GA: 5000

Time: 266.9735062122345

solution: {7: 130, 10: 140, 12: 252, 15: 90, 80: 13, 16: 24, 17: 20, 115: 1, 20: 40, 21: 429, 22: 13,

87: 0, 25: 323, 26: 221, 158: 108}

Task number: 161 WCRT BS: 5000

WCRT AI: 5000

Time: 293.9884419441223

solution: {7: 53, 10: 56, 12: 66, 15: 21, 80: 13, 16: 8, 17: 16, 115: 1, 20: 8, 21: 410, 22: 13, 87: 0,

25: 155, 26: 182, 158: 87}

Task number: 161 WCRT BS: 5000

WCRT STBA: 5000

Time: 3.21

Task number: 161

WCRT BS: 5000

### **REAL DATA (146):**

WCRT GA: 30628

Time: 276.76959896087646

solution: {6: 684, 7: 130, 8: 32, 10: 140, 11: 286, 12: 252, 14: 170, 15: 90, 16: 24, 17: 20, 20: 40, 21: 429, 22: 13, 23: 24, 25: 323, 26: 221, 29: 299, 33: 130, 47: 224, 49: 12, 50: 364, 51: 1660, 58: 14, 75: 15, 77: 126, 80: 13, 82: 45, 83: 7, 84: 558, 85: 152, 86: 26, 87: 0, 93: 208, 96: 225,

97: 208, 103: 180, 104: 42, 106: 18, 107: 14, 111: 126, 112: 51, 158: 108, 162: 1500}

Task number: 146 WCRT BS: 30628 WCRT AI: 30628

Time: 288.2062747478485

solution: {6: 68, 7: 127, 8: 23, 10: 106, 11: 212, 12: 119, 14: 80, 15: 37, 16: 5, 17: 12, 20: 11, 21: 262, 22: 13, 23: 23, 25: 246, 26: 90, 29: 225, 33: 121, 47: 127, 49: 6, 50: 264, 51: 597, 58: 11, 75: 15, 77: 86, 80: 13, 82: 41, 83: 3, 84: 359, 85: 46, 86: 21, 87: 0, 93: 36, 96: 216, 97: 56, 103:

142, 104: 38, 106: 13, 107: 14, 111: 44, 112: 18, 158: 74, 162: 878}

Task number: 146 WCRT BS: 30628

WCRT STBA: 30628

Time: 3.13

Task number: 146 WCRT BS: 30628

### REAL DATA (101):

WCRT GA: 6118

Time: 261.87536787986755

solution: {7: 130, 8: 32, 10: 140, 11: 286, 12: 252, 14: 170, 15: 90, 16: 24, 17: 20, 20: 40, 21: 429, 22: 13, 25: 323, 26: 221, 29: 299, 158: 108, 162: 1500, 47: 224, 49: 12, 50: 364, 115: 1}

Task number: 101 WCRT BS: 6118

WCRT AI: 6118

Time: 298.34359192848206

solution: {7: 70, 8: 32, 10: 37, 11: 115, 12: 77, 14: 139, 15: 27, 16: 13, 17: 18, 20: 18, 21: 246,

22: 13, 25: 182, 26: 214, 29: 282, 158: 38, 162: 431, 47: 154, 49: 4, 50: 59, 115: 1}

Task number: 101 WCRT BS: 6118

WCRT STBA: 6667

Time: 3

Task number: 101 WCRT BS: 6118

#### **REAL DATA (100):**

WCRT GA: 5761

Time: 270.8424279689789

solution: {7: 130, 8: 32, 10: 140, 11: 286, 12: 252, 14: 170, 15: 90, 16: 24, 17: 20, 20: 40, 21:

429, 22: 13, 25: 323, 26: 221, 29: 299, 158: 108, 49: 12, 50: 364, 115: 1}

Task number: 100 WCRT BS: 5761

WCRT STBA: 6320

Time: 3

Task number: 100 WCRT BS: 5761

### REAL DATA (95):

WCRT GA: 6277

Time: 257.9123840332031

solution: {7: 130, 8: 32, 10: 140, 11: 286, 12: 252, 14: 170, 15: 90, 16: 24, 17: 20, 20: 40, 21: 429, 22: 13, 25: 323, 26: 221, 29: 299, 158: 108, 162: 1500, 47: 224, 49: 12, 50: 364, 115: 1}

Task number: 95 WCRT BS: 6277

WCRT STBA: 6826

Time: 3

Task number: 95 WCRT BS: 6277

### REAL DATA (69):

WCRT GA: 7411

Time: 275.76308584213257

solution: {7: 130, 10: 140, 12: 252, 15: 90, 80: 13, 16: 24, 17: 20, 20: 40, 21: 429, 22: 13, 87: 0,

25: 323, 26: 221, 158: 108, 162: 1500, 115: 1}

Task number: 69 WCRT BS: 7411

WCRT STBA: 7633

Time: 3

Task number: 69 WCRT BS: 7411