Appendix 6-3 solution for j1201\_2.sm

After 18 iterations, the fitness valued (121) is found with a deviation of 11%, which is also smaller than 30%. The optimum here is 109.

v5 0 15.502389669418335 s [166, 166] 52.293577981651374 [0, 0, 0, 0, 1, 45, 52, 2, 59, 6, 49, 6, 7, 59, 6, 68, 74, 9, 59, 22, 16, 7, 77, 87, 5, 16, 73, 49, 2, 49, 16, 64, 95, 57, 85, 84, 8, 70, 69, 93, 99, 61, 25, 117, 32, 69, 93, 31, 69, 15, 94, 24, 24, 52, 63, 41, 61, 28, 64, 78, 61, 3, 64, 101, 65, 106, 67, 73, 9, 22, 69, 68, 78, 84, 79, 90, 79, 25, 126, 93, 99, 64, 80, 69, 79, 90, 103, 107, 102, 75, 90, 73, 104, 67, 86, 85, 126, 74, 104, 52, 83, 102, 92, 106, 110, 94, 134, 117, 112, 141, 112, 148, 119, 125, 106, 127, 117, 158, 126, 161, 136, 166] 0

134 159

v5 1 83.47131776809692 s [134, 140] 22.93577981651376 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 22, 10, 21, 19, 30, 22, 17, 31, 31, 22, 15, 31, 5, 63, 24, 14, 2, 14, 33, 15, 50, 22, 23, 69, 23, 23, 20, 37, 54, 24, 34, 38, 69, 34, 37, 40, 23, 62, 38, 41, 49, 54, 58, 54, 86, 50, 29, 69, 63, 3, 32, 45, 67, 61, 62, 71, 32, 69, 67, 77, 29, 75, 54, 75, 77, 50, 47, 37, 88, 19, 41, 78, 77, 80, 85, 92, 54, 26, 88, 85, 93, 31, 84, 42, 47, 75, 93, 17, 39, 88, 90, 61, 72, 80, 102, 102, 92, 109, 67, 116, 101, 110, 95, 112, 101, 126, 95, 129, 121, 134] 0

139 142

v5 2 160.95026087760925 s [134, 141] 22.93577981651376 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 22, 10, 21, 19, 30, 22, 17, 31, 31, 22, 15, 31, 5, 63, 24, 14, 2, 14, 33, 15, 50, 22, 23, 69, 23, 23, 20, 37, 54, 24, 34, 38, 69, 34, 37, 40, 23, 62, 38, 41, 49, 54, 58, 54, 86, 50, 29, 69, 63, 3, 32, 45, 67, 61, 62, 71, 32, 69, 67, 77, 29, 75, 54, 75, 77, 50, 47, 37, 88, 19, 41, 78, 77, 80, 85, 92, 54, 26, 88, 85, 93, 31, 84, 42, 47, 75, 93, 17, 39, 88, 90, 61, 72, 80, 102, 102, 92, 109, 67, 116, 101, 110, 95, 112, 101, 126, 95, 129, 121, 134] 0

133 133

v5 3 233.92062187194824 s [127, 198] 16.51376146788991 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 32, 22, 17, 33, 33, 22, 15, 33, 5, 71, 24, 14, 2, 14, 41, 15, 58, 24, 23, 62, 25, 23, 20, 39, 62, 27, 36, 40, 77, 35, 39, 42, 23, 55, 40, 49, 49, 62, 21, 52, 56, 53, 31, 77, 71, 3, 35, 47, 75, 69, 25, 49, 35, 77, 75, 31, 29, 83, 19, 68, 79, 60, 49, 39, 90, 19, 33, 45, 55, 83, 84, 90, 57, 26, 68, 79, 88, 36, 85, 55, 49, 90, 95, 17, 34, 100, 91, 69, 71, 82, 64, 100, 79, 71, 75, 78, 101, 108, 95, 110, 101, 111, 104, 114, 119, 127] 0

127 124

v5 4 305.8735110759735 s [124, 209] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

143 124

v5 5 393.0663433074951 s [124, 134] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

132 137

v5 6 474.6128931045532 s [124, 215] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

125 133

v5 7 567.0733342170715 s [124, 154] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

126 143

v5 8 648.4895849227905 s [124, 142] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

134 128

v5 9 723.1249980926514 s [124, 142] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

129 127

v5 10 795.5407991409302 s [124, 294] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

137 124

v5 11 882.2549955844879 s [124, 132] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

124 132

v5 12 975.7429685592651 s [124, 247] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

137 124

v5 13 1061.8488714694977 s [124, 150] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

127 128

v5 14 1139.0180571079254 s [124, 398] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

131 127

v5 15 1218.2125766277313 s [124, 142] 13.761467889908257 [0, 0, 0, 0, 1, 10, 3, 17, 10, 21, 14, 21, 24, 10, 21, 19, 25, 22, 17, 33, 33, 22, 15, 27, 5, 67, 24, 14, 2, 14, 41, 15, 73, 41, 23, 52, 26, 23, 20, 33, 77, 27, 36, 49, 73, 35, 48, 42, 23, 58, 58, 49, 49, 52, 21, 82, 87, 58, 48, 61, 61, 3, 49, 41, 65, 84, 25, 35, 41, 73, 65, 33, 29, 67, 19, 58, 69, 53, 58, 33, 82, 19, 33, 51, 41, 77, 80, 87, 50, 26, 89, 86, 89, 49, 69, 41, 58, 91, 87, 17, 34, 98, 86, 84, 86, 72, 80, 97, 91, 91, 90, 98, 98, 105, 96, 107, 102, 112, 102, 115, 116, 124] 0

121 124

v5 16 1294.6399114131927 s [121, 121] 11.009174311926607 [0, 0, 0, 0, 1, 1, 9, 5, 16, 9, 16, 9, 10, 16, 9, 25, 30, 10, 19, 25, 29, 10, 21, 32, 5, 48, 30, 5, 2, 5, 19, 21, 44, 13, 29, 54, 60, 28, 26, 38, 48, 42, 28, 32, 54, 79, 31, 34, 46, 71, 38, 27, 27, 54, 21, 72, 69, 61, 20, 63, 63, 3, 20, 46, 67, 55, 25, 25, 11, 54, 67, 41, 35, 69, 57, 60, 71, 38, 41, 38, 74, 21, 38, 42, 31, 81, 70, 84, 47, 32, 71, 71, 88, 31, 71, 42, 41, 76, 86, 19, 40, 94, 77, 55, 76, 76, 50, 94, 74, 57, 65, 64, 86, 102, 90, 104, 96, 106, 98, 109, 113, 121] 0

126 140

v5 17 1358.5178377628326 s [121, 319] 11.009174311926607 [0, 0, 0, 0, 1, 1, 9, 5, 16, 9, 16, 9, 10, 16, 9, 25, 30, 10, 19, 25, 29, 10, 21, 32, 5, 48, 30, 5, 2, 5, 19, 21, 44, 13, 29, 54, 60, 28, 26, 38, 48, 42, 28, 32, 54, 79, 31, 34, 46, 71, 38, 27, 27, 54, 21, 72, 69, 61, 20, 63, 63, 3, 20, 46, 67, 55, 25, 25, 11, 54, 67, 41, 35, 69, 57, 60, 71, 38, 41, 38, 74, 21, 38, 42, 31, 81, 70, 84, 47, 32, 71, 71, 88, 31, 71, 42, 41, 76, 86, 19, 40, 94, 77, 55, 76, 76, 50, 94, 74, 57, 65, 64, 86, 102, 90, 104, 96, 106, 98, 109, 113, 121] 0

127 130

v5 18 1434.1226987838745 s [121, 139] 11.009174311926607 [0, 0, 0, 0, 1, 1, 9, 5, 16, 9, 16, 9, 10, 16, 9, 25, 30, 10, 19, 25, 29, 10, 21, 32, 5, 48, 30, 5, 2, 5, 19, 21, 44, 13, 29, 54, 60, 28, 26, 38, 48, 42, 28, 32, 54, 79, 31, 34, 46, 71, 38, 27, 27, 54, 21, 72, 69, 61, 20, 63, 63, 3, 20, 46, 67, 55, 25, 25, 11, 54, 67, 41, 35, 69, 57, 60, 71, 38, 41, 38, 74, 21, 38, 42, 31, 81, 70, 84, 47, 32, 71, 71, 88, 31, 71, 42, 41, 76, 86, 19, 40, 94, 77, 55, 76, 76, 50, 94, 74, 57, 65, 64, 86, 102, 90, 104, 96, 106, 98, 109, 113, 121] 0

Process finished with exit code -1