c Código fantôma homem- modificado

c Cell Cards

1 1 -1.87 -1 imp:p,e=1 $source

4 3 -1.04 ((-13 20 -5):(-213 20 -5)) #21 imp:p,e=1 $ legs

5 2 -0.00129 (((313 4 -5 413):-4):(11 5 -6):(21 6 -22): &

(14 22 -12):(24 12 -15)) 1 2 7 -8 9 -10 #64 #15 imp:p,e=1 $outsides of phantom

6 3 -1.04 ((-23 6 -22 114) #44 #18 #118 ):(-21 22 -322 114):((322 -12 -18 116) &

#41 #43 #17):((-524 12 116) #43 #42) imp:p,e=1 $ head and neck

7 3 -1.04 (-5 20 -313 13):(213 -413 -5 20):(4 -20 -313):(4 -20 -413): &

(-11 16 5 -19):(-11 19 -6 21): &

(-21 23 6 -22):(22 -322 21 -14):(-14 18 322 -12):(12 -24 524) imp:p,e=1 $skin

8 4 -0.296 (-27:28:-29:30) -25 31 imp:p,e=1 $right lung

9 4 -0.296 (33:34:32) -26 31 imp:p,e=1 $ left lung

10 3 -1.04 -35 36 -37 -38 imp:p,e=1 $liver

11 3 -1.04 -39 40 #47 imp:p,e=1 $stomach

12 3 -1.04 -40 imp:p,e=1 $ contents

13 3 -1.04 -41 42 imp:p,e=1 $ urinary bladder

14 3 -1.04 -42 imp:p,e=1 $ contents

15 3 -1.04 (-43):(-44) imp:p,e=1 $ testes

17 3 -1.04 -45 imp:p,e=1 $brain

18 3 -1.04 (-48 175 37 -19):(-176 177 -178) imp:p,e=1 $esophagus:thoracic+abdominal portion

118 0 -175 37 -19 imp:p,e=1 $ void in esophagus

19 3 -1.04 (-49 50 51 -52):(-53 54 -55 56):(-57 58 59 -52):(-61 62 -59 65): &

(-63 64 -65 5) imp:p,e=1 $colon:ascending, transverse, descending and sigmoid

20 3 -1.04 (-50 51 -52):(-54 -55 56):(-58 59 -52):(-62 -59 65): &

(-64 -65 5) imp:p,e=1 $contents-colon

21 5 -1.4 (-66 20 -5):(20 -5 -67) imp:p,e=1 $ leg bones

24 5 -1.4 (-68 5 -70 -16):(-69 5 -70 -16) imp:p,e=1 $ arm bones

25 5 -1.4 (-71 272 -72 -119):(-71 -73 -273 -119) imp:p,e=1 $clavicles

26 5 -1.4 (75 -74 78 -79 119 80 -81):(75 -74 78 -79 119 -76 77) imp:p,e=1 $scapulae

28 5 -1.4 ((-83 82 -86 87 5 -85):(82 -83 87 85 -84)) imp:p,e=1 $pelvis

29 5 -1.4 ((-75 89 90 -91):(-75 89 92 -93):(-75 89 94 -95):(-75 89 31 -96): &

(-75 89 97 -98):(-75 89 99 -100):(-75 89 101 -102):(-75 89 103 -104): &

(-75 89 105 -106):(-75 89 107 -108):(-75 89 109 -110):(-75 89 111 -79)) &

#10 #24 #25 #26 imp:p,e=1 imp:p,e=1 $rib cage

41 5 -1.4 (-112 84 -90):(-112 90 -19):(19 -113 -114) imp:p,e=1 $spine

c 41 5 -1.4 -112 84 -90 imp:p,e=1 $spine, lower portion

c 411 5 -1.4 -112 90 -19 imp:p,e=1 $ spine, middle portion

c 412 5 -1.4 19 -113 -114 imp:p,e=1 $ spine, upper portion

42 5 -1.4 -116 45 -12 #18 imp:p,e=1 $skull-cranium

43 5 -1.4 (-116 45 12 #18):(118 -117 120 -121 -119 116) imp:p,e=1 $facial skeleton

44 3 -1.04 (((-125 134 -122 6 -133 123 127):(-126 128 -122 123 -134 6 -133)): &

((-129 131 134 -122 123 133 -47):(-130 132 -134 -122 123 133 -47))) ( &

-122 123 -23 -124 6 -47) imp:p,e=1 $thyroid

45 3 -1.04 (-135 65):(-136 -137) imp:p,e=1 $ kidneys

47 3 -1.04 (-138 139 -65):(-138 65 140) imp:p,e=1 $pancreas

48 3 -1.04 -141 imp:p,e=1 $spleen

49 3 -1.04 -142 imp:p,e=1 $thymus

50 3 -1.04 (-143 145):(-144 145) imp:p,e=1 $ adrenals

52 3 -1.04 (-146 147 -148):(-149 150 148 -348) imp:p,e=1 $gall bladder

53 3 -1.04 (-147 -148):(-150 148 -145) imp:p,e=1 $gall bladder-contents

54 3 -1.04 -151 152 153 #56 #57 imp:p,e=1 $heart -left ventricle

55 3 -1.04 -152 153 #56 #57 imp:p,e=1 $ heart-left ventricle-contents

56 3 -1.04 -154 155 153 -156 151 imp:p,e=1 $right ventricle

57 3 -1.04 -155 153 -156 151 imp:p,e=1 $right ventricle-contents

58 3 -1.04 (-157 158 -153 156):(-159 160 -153 -156) imp:p,e=1 $left atrium-part 1 and 2

59 3 -1.04 (-158 -153 156):(-160 -153 -156) imp:p,e=1 $contents of the left atrium

60 3 -1.04 -161 162 -153 -156 159 imp:p,e=1 $right atrium

61 3 -1.04 -162 -153 -156 159 imp:p,e=1 $contents-right atrium

62 3 -1.04 ((-82 164 -165 52 -36):(-82 49 164 -165 166 -52)) #19 #20 imp:p,e=1 $small intestine

63 3 -1.04 ((-16 5 -19):(19 -6 -21 114)) #8 #9 #10 #11 #12 #13 #14 &

#18 #19 #20 #24 #25 #26 #28 #29 &

#41 #45 #47 #48 #49 #50 #52 #53 #54 #55 &

#56 #57 #58 #59 #60 #61 #62 #118 imp:p,e=1 $trunk

64 3 -1.04 ((171 -5)(172 -170)(-119 169)(313 413)) 43 44 imp:p,e=1 $ male genitalia

65 0 -2:-7:8:-9:10:15 imp:p,e=0

66 3 -1.04 170 -171 -172 #35 #36 #37 #38 imp:p,e=1 $cilindro dentro fígado

67 6 -11.34 173 -174 -175 176 177 -178 imp:p,e=1 $colimador 1

68 6 -11.34 179 -180 -175 176 177 -178 imp:p,e=1 $colimador 2

69 6 -11.34 181 -182 -175 176 -183 184 imp:p,e=1 $c3

70 6 -11.34 181 -182 -175 176 185 -186 imp:p,e=1 $c4

c end of cell Cards

c Surface Cards

1 s 0 -100 91.45 1

2 pz -300.0

4 pz -80.0

5 pz 0.0

6 pz 70.0

7 px -1000.0

8 px 1000.0

9 py -1000.0

10 py 1000.0

11 sq 100 400 0 0 0 0 -40000 0 0 0 $trunk-skin

12 pz 91.45

13 gq 1 1 0 0 0 -0.2 -20 0 0.04 3.96 $ left leg

213 gq 1 1 0 0 0 0.2 20 0 0.04 3.96 $ right leg

313 gq 1 1 0 0 0 -0.2 -20 0 0 0 $ left leg skin

413 gq 1 1 0 0 0 0.2 20 0 0 0 $ right leg skin

14 sq 100 64 0 0 0 0 -6400 0 0 0 $head1-skin

15 pz 200.0

16 sq 96.04 392.04 0 0 0 0 -37651.521 0 0 0 $trunk

18 sq 96.04 60.84 0 0 0 0 -5843.0736 0 0 0 $head1

19 pz 69.80

20 pz -79.8

21 cz 5.4

22 pz 78.40

322 pz 78.6

23 cz 5.20 $neck

24 sq 5112.25 3271.84 6400 0 0 0 -327184 0 0 91.45 $head2

524 sq 4638.172 2938.72 5843.074 0 0 0 -282235.1 0 0 91.45 $head2

25 sq 32400 14400 1406.25 0 0 0 -810000 -8.50 0 43.50 $right lung

26 sq 32400 14400 1406.25 0 0 0 -810000 8.50 0 43.5 $ left lung

27 pz 46

28 pz 54

29 px -5.4

30 py 1.5 $ end the section removed from the right lung

31 pz 43.5

32 pz 55

33 px 8.0

34 py 1.0 $end the section removed from the left lung

35 sq 64 272.25 0 0 0 0 -17424 0 0 0 $liver

36 pz 27

37 pz 43

38 p 0.028571 0.022222 -0.023256 -1 $end def the liver

39 sq 576 896 144 0 0 0 -9216 8 -4 35 $ stomach-wall

40 sq 310.914543 625.988841 65.363490 0 0 0 -3566.739812 8 -4 35 $ stomach-contents

41 sq 142.988120 293.942933 293.942933 0 0 0 -3514.900218 0 -4.50 8 $urinary bladder-wall

42 sq 105.646247 227.630725 227.630725 0 0 0 -2339.687839 0 -4.50 8 $bladder-contents

43 sq 11.9025 8.9401 3.8025 0 0 0 -20.115225 -1.30 -8 -2.30 $testes-left

44 sq 11.9025 8.9401 3.8025 0 0 0 -20.115225 1.30 -8 -2.30 $testes-right

45 sq 2445.3025 1440.2025 3221.6976 0 0 0 -106517.3769 0 0 91.45 $brain

c 37 pz 43.0

47 pz 75.0

48 sq 0.1764 1.3689 0 0 0 0 -0.24147396 0 2.575 0 $esophagus: thoracic+abdominal portion

175 sq 0.0144 0.7569 0 0 0 0 -0.01089936 0 2.575 0

176 5 cx 0.70

177 5 px 0.10

178 5 px 7.80

49 sq 6.25 6.25 0 0 0 0 -39.0625 -8.50 -2.36 0 $ULI- upper large intestine 1.ascending colon-wall

50 sq 3.20947225 3.20947225 0 0 0 0 -10.300712135 -8.5 -2.36 0 $ascending colon-contents

51 pz 14.45

52 pz 24.0 $end ac. col.

53 sq 0 2.25 6.25 0 0 0 -14.0625 0 -2.36 25.50 $ ULI 2.transverse colon-wall

54 sq 0 0.946729 3.892729 0 0 0 -3.68539433441 0 -2.36 25.50 $ transverse colon-contents

55 px 10.50

56 px -10.50

57 gq 0.282933 0.220415 0.00663757 0 0.0721253 -0.0288859 -4.541008 -0.628932 &

0.128904 17.669146 $LLI-lower large intestine 1. descending colon-wall

58 gq 0.556917 0.395554 0.0120398 0 0.129435 -0.056858 -8.938371 -1.128675 &

0.271613 35.669768 $descending colon-contents

59 pz 8.72

c 52 pz 24.0

61 ty 3.0 0 8.72 5.72 1.57 1.57 $LLI 2. sigmoid colon -upper

62 ty 3.0 0 8.72 5.72 0.91 0.91

63 ty 3.0 0 0 3.0 1.57 1.57 $sigmoid colon -lower

64 ty 3.0 0 0 3.0 0.91 0.91 $sigmoid colon -lower

65 px 3.0

66 gq 1 1 0.00906872 0 0 -0.200501 -20 0 1.78571 87.75 $left leg bone

67 gq 1 1 0.00906872 0 0 0.200501 20 0 1.78571 87.75 $right leg bone

68 gq 0.510204 0.137174 0 0 0 0.010352 -19.4898 0 -0.204969 185.878 $left arm bone

69 gq 0.510204 0.137174 0 0 0 0.010352 18.0612 0 0.175983 159.592 $right arm bone

70 pz 69

71 tz 0 11.1 68.25 20 0.7883 0.7883 $clavicles

72 p 0.89415 1 0 11.1

73 p -0.89415 1 0 11.1

272 p 7.0342 1 0 11.1

273 p 7.0342 -1 0 -11.1

75 sq 94.09 289 0 0 0 0 -27192.01 0 0 0 $scapulae

c 75 sq 96.04 361 0 0 0 0 -34670.44 0 0 0

74 sq 95.8441 289 0 0 0 0 -27698.94 0 0 0

76 p 0.25 -1 0 0 $left

77 p 0.80 -1 0 0

78 pz 50.9

79 pz 67.3

80 p 0.25 1 0 0 $right

81 p 0.80 1 0 0

82 sq 127.69 127.69 0 0 0 0 -16304.7361 0 -3.8 0 $pelvis

83 sq 144 144 0 0 0 0 -20736 0 -3 0

84 pz 22

85 pz 14

86 py 5

87 py -3

c 75 88 sq 96.04 289 0 0 0 0 -27755.56 0 0 0 $rib cage

89 sq 86.49 272.25 0 0 0 0 -23546.9025 0 0 0

90 pz 35.1

91 pz 36.5

92 pz 37.9

93 pz 39.3

94 pz 40.7

95 pz 42.1

c 31 pz 43.5

96 pz 44.9

97 pz 46.3

98 pz 47.7

99 pz 49.1

100 pz 50.5

101 pz 51.9

102 pz 53.3

103 pz 54.7

104 pz 56.1

105 pz 57.5

106 pz 58.9

107 pz 60.3

108 pz 61.7

109 pz 63.1

110 pz 64.5

111 pz 65.9

c 79 pz 67.3

112 sq 6.25 4 0 0 0 0 -25 0 5.50 0 $ spine-mid, lower

113 pz 84.8

114 sq 6.25 4 0 0 0 0 -25 0 1.45 0 $ spine-upper

c 45 sq 2445.3025 1440.2025 3221.6976 0 0 0 -106517.3769 0 0 91.45 $skull -crnium

116 sq 3991.080625 2487.515625 5076.5625 0 0 0 -224498.28515625 0 0 91.45 $skull-cranium

117 sq 81 49 0 0 0 0 -3969 0 0 0 $ facial skeleton

118 sq 57.76 31.36 0 0 0 0 -1811.3536 0 0 0 $facial skeleton

c 80 sq 5112.25 3271.84 6400 0 0 0 -327184 0 0 91.45 $the statements defining the cranium

119 py 0.0

120 pz 82.4

121 pz 93.13

122 c/z 0 -4.0 2.2 $thyroid

123 c/z 0 -4.0 1.0

124 py -4

125 gq 1 1 -0.531464 -2 0 0 -8 8 78.9413 -2915.4 $thyroid (inside R)

126 gq 1 1 -0.531464 2 0 0 8 8 78.9413 -2915.4 $thyroid (inside R)

127 gq 1 1 -0.109807 -2 0 0 -8 8 16.3102 -589.661 $thyroi (outside r)

128 gq 1 1 -0.109807 2 0 0 8 8 16.3102 -589.661 $thyroid (outside r)

129 gq 1 1 -0.0590516 -2 0 0 -8 8 7.34563 -212.437 $thyroid (inside R)

130 gq 1 1 -0.0590516 2 0 0 -8 8 7.34563 212.437 $thyroid (inside R)

131 gq 1 1 -0.0122007 -2 0 0 -8 8 1.51769 -31.1977 $thyroid (outside r)

132 gq 1 1 -0.0122007 2 0 0 8 8 1.51769 -31.1977 $thyroid (outside r)

133 pz 71.25

134 px 0

135 sq 68.0625 612.5625 45.5625 0 0 0 -1378.265625 6.0 6.0 32.50 $left kidney

136 sq 68.0625 612.5625 45.5625 0 0 0 -1378.265625 -6.0 6.0 32.50 $right kidney

c 65 px 3

137 px -3

138 sq 15.6816 2787.84 368.64 0 0 0 -4014.4896 -1.0 0 37 $pancreas

139 px -1

140 pz 37

141 sq 144 441 49 0 0 0 -1764 11 3 37 $spleen

142 sq 10.24 36 1.44 0 0 0 -23.04 0 -7.30 57.00 $thymus

143 1 sq 6.25 56.25 0.5625 0 0 0 -14.0625 0 0 0 $ left adrenal

144 2 sq 6.25 56.25 0.5625 0 0 0 -14.0625 0 0 0 $ right adrenal

145 1 pz 0

146 3 so 2.12 $ gall bladder

147 3 so 2.0 $ gall bladder

148 3 pz 0

348 3 pz 8

149 3 sq 1 1 -0.05175625 0 0 0.4823 -4.4944 0 0 0 $ gall bladder

150 3 sq 1 1 -0.05175625 0 0 0.455 -4 0 0 0 $ gall bladder

151 4 sq 240.25 710.7556 1849 0 0 0 -17768.89 0 0 0 $ HEART left ventricle

152 4 sq 44.3556 172.6596 729.5401 0 0 0 -2363.709924 0 0 0 $left ventricle (wall+contents)

153 4 px 0

154 4 sq 1225 3624.08 1849 0 0 0 -90601 0 0 0 $ right ventricle (wall+contens)

155 4 sq 792.9856 2621.44 1239.04 0 0 0 -50751.0784 0 0 0 $ right ventricle

156 4 pz 0

157 4 sq 240.25 280.2276 729 0 0 0 -7005.69 0 0 0 $left atrium (wall+contents)-part 1

158 4 sq 173.1856 203.9184 574.5609 0 0 0 -4504.557456 0 0 0 $ left atrium (wall+contents)-part 1

159 4 sq 110.25 128.5956 729 0 0 0 -3214.89 0 0 0 $ left atrium (wall+contents)-part 2

160 4 sq 71.5716 84.2724 574.5609 0 0 0 -1861.577316 0 0 0 $ left atrium (wall+contents)part 2

161 4 sq 1225 1428.84 729 0 0 0 -35721 0 0 0 $ right atrium

162 4 sq 991.6201 1167.5889 574.5609 0 0 0 -25792.038801 0 0 0 $ right atrium (wall+contents)

c 82 163 sq 127.69 127.69 0 0 0 0 -16304.7361 0 -3.80 0 $small intestine

164 py -4.86

165 py 2.20

166 pz 17

c 36 pz 27 $end small intestine

171 pz -4.8 $male genitalia

172 p 1 0 0.1 -10 $xz plane

170 p 1 0 -0.1 10

169 p 0 1 0.1 -10 $yz plane

170 pz 34.75 $altura cilindro

171 pz 35.25 $altura cilindro

172 c/z -10 -5 0.798 $cilindro no fígado

173 PX -8 $colimador1(c1)

174 PX -3 $c1

175 PY -67.5 $c1 & c2 & c3 & c4

176 PY -72.5 $c1 & c2 & c3 & c4

177 PZ -2.5 $c1 & c2

178 PZ 2.5 $c1 & c2

179 PX 3 $c2

180 PX 8 $c2

181 PX -8 $c3 & c4

182 PX 8 $c3 & c4

183 PZ -2.5 $c3

184 PZ -7.5 $c3

185 PZ 2.5 $c4

186 PZ 7.5 $c4

c end surface cards

vol j 20800 j 5250 2890 1810 1560 1830 152 250 45.7 203 37.6 1370 44.7 j &

372.5 360.9 2800 956 54.7 202 606 694 983 618 305 19.9 288 &

90.7 176 20.1 15.7 10.1 53.6 177 102 67.2 108 31.6 115 27.4 &

111 1060 43090 196 j

tr1 3.5 5.0 38 0.616 0.788 0 -0.788 0.616 0 0 0 1

tr2 -3.5 5 38 0.616 -0.788 0 0.788 0.616 0 0 0 1

tr3 -4.5 -3.2 30 0.9615 0 -0.2748 -0.0574 0.9779 -0.2008 0.2687 0.2090 0.9403

tr4 1 -1.8 50 0.6751 -0.4727 -0.5664 -0.4640 0.3249 -0.8241 0.5736 0.8191 0

tr5 0 2.575 42.30 0.736084 -0.604969 -0.303634 0.634945 0.772557 0 0.234575 &

-0.192791 0.952789

c Material Cards

m1 55137 1.0 $source

m2 7000 0.8 8000 0.2 $air

m3 1000 10.454E-02 6000 22.663E-02 7000 2.490E-02 8000 &

63.525E-02 11000 0.112E-02 12000 0.013E-02 14000 0.030E-02 &

15000 0.134E-02 16000 0.204E-02 17000 0.133E-02 19000 &

0.208E-02 20000 0.024E-02 26000 0.005E-02 30000 0.003E-02 &

37000 0.001E-02 40000 0.001E-02 $soft tissue

m4 1000 10.134E-02 6000 10.238E-02 7000 2.866E-02 8000 &

75.752E-02 11000 0.184E-02 12000 0.007E-02 14000 0.006E-02 15000 &

0.080E-02 16000 0.225E-02 17000 0.266E-02 19000 &

0.194E-02 20000 0.009E-02 26000 0.037E-02 30000 0.001E-02 &

37000 0.001E-02 $lung

m5 1000 7.337E-02 6000 25.475E-02 7000 3.057E-02 8000 &

47.893E-02 9000 0.025E-02 11000 0.326E-02 12000 0.112E-02 14000 0.002E-02 &

15000 5.095E-02 16000 0.173E-02 17000 0.143E-02 19000 &

0.153E-02 20000 10.190E-02 26000 0.008E-02 30000 0.005E-02 &

37000 0.002E-02 38000 0.003E-02 82000 0.001E-02 $skeleton

m6 82207 1 $chumbo

mode p e

c source

SDEF PAR 2 POS 0 -107.5 0 VEC 0 1 0 DIR=d1 ERG=0.1 $E = 1keV

SI1 H -1 0.984 1 $theta=10 graus

SP1 0 0.9924 0.0076

SB1 0 0 1

c tally

F4:p 1

F14:e 1

F6:p 1

F16:e 1

\*F8:p 1

\*F18:e 1

nps 5e8

print 110

prdmp 0 1e4