```
==================================
passed test on empty List X & Y
==================================
test case 1 of 990000
initial X: -6  -6  -1   1   1   2
initial Y: -8  -8  -8  -7  -2  -2   0   1   1   8
ought2b Z: -8  -8  -8  -7  -6  -6  -2  -2  -1   0   1   1   1   1   2   8
outcome Z: -8  -8  -8  -7  -6  -6  -2  -2  -1   0   1   1   1   1   2   8
==================================
test case 2 of 990000
initial X: 1   6
initial Y:
ought2b Z: 1   6
outcome Z: 1   6
==================================
test case 3 of 990000
initial X: -4  -3  -2  -2   3
initial Y:
ought2b Z: -4  -3  -2  -2   3
outcome Z: -4  -3  -2  -2   3
==================================
test case 4 of 990000
initial X: -9  -5  -5  -4  -3   4   5   6   7   8
initial Y: -8  -7  -7  -6   0   0   5   5   7   7
ought2b Z: -9  -8  -7  -7  -6  -5  -5  -4  -3   0   0   4   5   5   5   6   7   7   7   8
outcome Z: -9  -8  -7  -7  -6  -5  -5  -4  -3   0   0   4   5   5   5   6   7   7   7   8
==================================
test case 5 of 990000
initial X: -8  -6  -5  -4   5   6
initial Y: -4   7
ought2b Z: -8  -6  -5  -4  -4   5   6   7
outcome Z: -8  -6  -5  -4  -4   5   6   7
==================================
test case 45000 of 990000
initial X:
initial Y: -9   1   7
ought2b Z: -9   1   7
outcome Z: -9   1   7
==================================
test case 90000 of 990000
initial X: -1   1
initial Y: -7  -5   9
ought2b Z: -7  -5  -1   1   9
outcome Z: -7  -5  -1   1   9
==================================
test case 135000 of 990000
initial X: -8  -6  -4  -3   3   3   4   9
initial Y:
ought2b Z: -8  -6  -4  -3   3   3   4   9
outcome Z: -8  -6  -4  -3   3   3   4   9
==================================
test case 180000 of 990000
initial X: -9  -2   3   4
initial Y: -8   6
ought2b Z: -9  -8  -2   3   4   6
outcome Z: -9  -8  -2   3   4   6
==================================
test case 225000 of 990000
initial X: 6
initial Y:
ought2b Z: 6
outcome Z: 6
==================================
test case 270000 of 990000
initial X: -7  -4  -1  -1  -1   2   5   5
initial Y: -8  -5   3
ought2b Z: -8  -7  -5  -4  -1  -1  -1   2   3   5   5
outcome Z: -8  -7  -5  -4  -1  -1  -1   2   3   5   5
==================================
```

```
70    test case 315000 of 990000
71    initial X: 1
72    initial Y: -3  -2  -1  -1   0   3   5   7   8
73    ought2b Z: -3  -2  -1  -1   0   1   3   5   7   8
74    outcome Z: -3  -2  -1  -1   0   1   3   5   7   8
75    ===============================
76    test case 360000 of 990000
77    initial X:
78    initial Y: -8  -5  -2   0   5   8   9
79    ought2b Z: -8  -5  -2   0   5   8   9
80    outcome Z: -8  -5  -2   0   5   8   9
81    ===============================
82    test case 405000 of 990000
83    initial X: -9  -8  -6  -6  -4
84    initial Y: -7  -5  -3  -3  -2   1   4   9
85    ought2b Z: -9  -8  -7  -6  -6  -5  -4  -3  -3  -2   1   4   9
86    outcome Z: -9  -8  -7  -6  -6  -5  -4  -3  -3  -2   1   4   9
87    ===============================
88    test case 450000 of 990000
89    initial X: -1   1   4   6   9
90    initial Y:  1   8   8   9
91    ought2b Z: -1   1   1   4   6   8   8   9   9
92    outcome Z: -1   1   1   4   6   8   8   9   9
93    ===============================
94    test case 495000 of 990000
95    initial X: -7  -5  -1  -1   2   4   4   4   6   6
96    initial Y: -5  -5   0   2   7
97    ought2b Z: -7  -5  -5  -5  -1  -1   0   2   2   4   4   4   6   6   7
98    outcome Z: -7  -5  -5  -5  -1  -1   0   2   2   4   4   4   6   6   7
99    ===============================
100   test case 540000 of 990000
101   initial X: -1  -1   1   3   5   7   8
102   initial Y: -5  -5  -1   3   3   6   8   8   9
103   ought2b Z: -5  -5  -1  -1  -1   1   3   3   3   5   6   7   8   8   8   9
104   outcome Z: -5  -5  -1  -1  -1   1   3   3   3   5   6   7   8   8   8   9
105   ===============================
106   test case 585000 of 990000
107   initial X: -6   3   9
108   initial Y:
109   ought2b Z: -6   3   9
110   outcome Z: -6   3   9
111   ===============================
112   test case 630000 of 990000
113   initial X: -5  -4   3   6
114   initial Y: -4  -2   4
115   ought2b Z: -5  -4  -4  -2   3   4   6
116   outcome Z: -5  -4  -4  -2   3   4   6
117   ===============================
118   test case 675000 of 990000
119   initial X: -2   3
120   initial Y:
121   ought2b Z: -2   3
122   outcome Z: -2   3
123   ===============================
124   test case 720000 of 990000
125   initial X:
126   initial Y: -8   0
127   ought2b Z: -8   0
128   outcome Z: -8   0
129   ===============================
130   test case 765000 of 990000
131   initial X: -9  -9  -7  -5   3   4   6   6   8
132   initial Y: -9  -7   6   7   7   8   8
133   ought2b Z: -9  -9  -9  -7  -7  -5   3   4   6   6   6   7   7   8   8   8
134   outcome Z: -9  -9  -9  -7  -7  -5   3   4   6   6   6   7   7   8   8   8
135   ===============================
136   test case 810000 of 990000
137   initial X:
138   initial Y: -7  -3   0   0   3   5   7   9
```

```
139    ought2b Z: -7  -3  0  0  3  5  7  9
140    outcome Z: -7  -3  0  0  3  5  7  9
141    ==================================
142    test case 855000 of 990000
143    initial X: -9  -7  -1  -1  0  3  9
144    initial Y: -8  -2  5  7  9
145    ought2b Z: -9  -8  -7  -2  -1  -1  0  3  5  7  9  9
146    outcome Z: -9  -8  -7  -2  -1  -1  0  3  5  7  9  9
147    ==================================
148    test case 900000 of 990000
149    initial X: -7  -6  -4  -1  0  8
150    initial Y: -9  -5  -4  -3  0  2  5  7  8
151    ought2b Z: -9  -7  -6  -5  -4  -4  -3  -1  0  0  2  5  7  8  8
152    outcome Z: -9  -7  -6  -5  -4  -4  -3  -1  0  0  2  5  7  8  8
153    ==================================
154    test case 945000 of 990000
155    initial X:
156    initial Y: -9  -7  -6  -5  -2  3  6  7  9
157    ought2b Z: -9  -7  -6  -5  -2  3  6  7  9
158    outcome Z: -9  -7  -6  -5  -2  3  6  7  9
159    ==================================
160    test case 990000 of 990000
161    initial X: -4  0  0  1  4  4  6  9
162    initial Y: -5  -3  1  1  2  2  6  6  6  9
163    ought2b Z: -5  -4  -3  0  0  1  1  1  2  2  4  4  6  6  6  6  9  9
164    outcome Z: -5  -4  -3  0  0  1  1  1  2  2  4  4  6  6  6  6  9  9
165    ==================================
166    test program terminated normally
167    ==================================
168
```