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Test Cases Document

The first test case was to verify that the program could take the smallest amount of input allowed, as well as dealing with just zeroes, and print out correctly.

```
1
1
0 0
0 0
```

The second test case I made tested for if my program was able to run n = 5 permutations in under a second. I also used various high coordinate values to make sure it could handle such.

```
1
5
557 16
-521 36
344 298
770 -276
-575 -153
-718 614
-297 238
67 479
-45 272
-575 -151
```

The third test case I made tested for if my program was able to run n = 6 in under a second.

```
1
6
3 -7
-10 -8
6 0
2 8
4 -7
-5 4
-2 -5
```

-1 5
6 8
-4 -6
-8 10
5 9

The fourth test case I made deals with when you have both a min and max case for the coordinate points. In this situation, it includes (0,0), (-1000,1000), (1000,-1000) to help estimate what the original res variable should be set to. This specific case reached 3812.706 so I had to make adjustments to the res value.

1
8
0 0
-512 -78
460 10
-993 -732
779 -688
-740 -105
187 -639
230 393
853 -132
-1000 1000
89 -290
-862 781
697 -670
-900 96
-531 828
1000 -1000

The fifth and last test case I made consisted of six cases with n = 3 all the way to n = 8, allowing me to verify that multiple test cases can run with their own individual answers. It is too long to include in this word document but is included in my treehouse.in file.