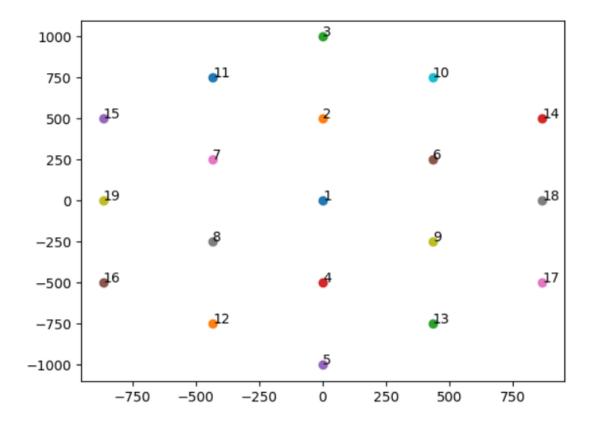
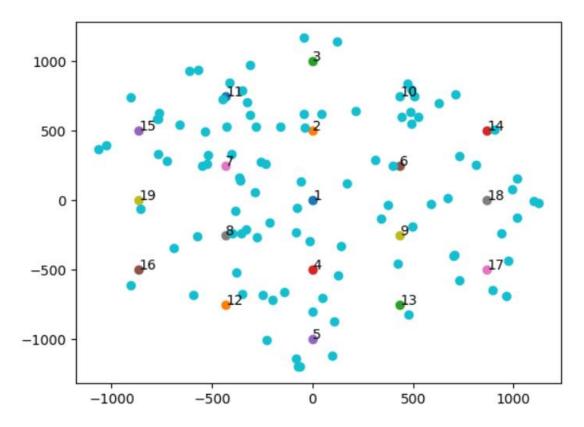
# B-1



# **B-2**



First, I uniform randomly choose a number represent a cell (1 $^{\sim}$ 19), then I uniform randomly choose a (x,y) coordination which falls in that cell. (It is completely equal to choose a (x,y) coordination in the whole region directly)

## **B-3**

time: 2s Source cell ID: 7 Destination cell ID8 time: 2s Source cell ID:1 Destination cell ID7 time: 4s Source cell ID:10 Destination cell ID 14 time: 5s Source cell ID: 2 Destination cell ID: 3 time: 6s Source cell ID:17 Destination cell ID 18 time: 7s Source cell ID: 7 Destination cell ID 1 time: 10s Source cell ID:19 Destination cell ID 15 time: 19s Source cell ID:16 Destination cell ID 12 time: 21s Source cell ID: 6 Destination cell ID: 14 time: 22s Source cell ID:15 Destination cell ID 19 time: 25s Source cell ID:14 Destination cell ID:10 time: 27s Source cell ID: 1 Destination cell ID 6 time: 28s Source cell ID: 8 Destination cell ID 16 time: 33s Source cell ID:10 Destination cell ID 14 time: 33s Source cell ID:13 Destination cell ID 4 time: 37s Source cell ID:14 Destination cell ID:10 time: 38s Source cell ID:14 Destination cell ID:10 time: 41s Source cell ID:10 Destination cell ID:14 time: 42s Source cell ID: 8 Destination cell ID 7 time: 42s Source cell ID: 4 Destination cell ID 5 time: 44s Source cell ID: 6 Destination cell ID 1 time: 45s Source cell ID: 3 Destination cell ID 2 time: 45s Source cell ID: 6 Destination cell ID: 1 time: 47s Source cell ID:19 Destination cell ID 7 time: 47s Source cell ID: 1 Destination cell ID9 time: 48s Source cell ID:13 Destination cell ID9 time: 51s Source cell ID: 9 Destination cell ID:1 time: 52s Source cell ID:13 Destination cell ID9 time: 52s Source cell ID: 7 Destination cell ID8 time: 55s Source cell ID: 2 Destination cell ID 6 time: 55s Source cell ID: 5 Destination cell ID 4

- time: 56s Source cell ID:10 Destination cell ID 6
- time: 57s Source cell ID:11 Destination cell ID 15
- time: 61s Source cell ID: 2 Destination cell ID 3
- time: 64s Source cell ID:18 Destination cell ID 6
- time: 64s Source cell ID:12 Destination cell ID 16
- time: 64s Source cell ID: 6 Destination cell ID 10
- time: 66s Source cell ID: 9 Destination cell ID 13
- time: 67s Source cell ID: 1 Destination cell ID 9
- time: 67s Source cell ID: 3 Destination cell ID 11
- time: 68s Source cell ID: 4 Destination cell ID 13
- time: 72s Source cell ID: 5 Destination cell ID 13
- time: 75s Source cell ID:1 Destination cell ID2
- time: 76s Source cell ID:11 Destination cell ID 3
- time: 79s Source cell ID:12 Destination cell ID 16
- time: 81s Source cell ID: 9 Destination cell ID 13
- time: 81s Source cell ID: 2 Destination cell ID 1
- time: 84s Source cell ID:15 Destination cell ID 11
- time: 85s Source cell ID:14 Destination cell ID:10
- time: 90s Source cell ID:1 Destination cell ID2
- time: 91s Source cell ID:13 Destination cell ID 5
- time: 96s Source cell ID: 9 Destination cell ID 6
- time: 98s Source cell ID: 7 Destination cell ID 1
- time: 98s Source cell ID: 7 Destination cell ID 1
- time: 107s Source cell ID:1 Destination cell ID 6
- time: 109s Source cell ID:13 Destination cell ID 9
- time: 109s Source cell ID:1 Destination cell ID4
- time: 110s Source cell ID: 4 Destination cell ID: 13
- time: 114s Source cell ID: 2 Destination cell ID 1
- time: 121s Source cell ID:8 Destination cell ID7
- time: 122s Source cell ID: 7 Destination cell ID 1
- time: 125s Source cell ID:10 Destination cell ID3
- time: 138s Source cell ID:17 Destination cell ID 13
- time: 138s Source cell ID: 9 Destination cell ID 17
- time: 140s Source cell ID:13 Destination cell ID9
- time: 141s Source cell ID:13 Destination cell ID 17
- time: 144s Source cell ID: 9 Destination cell ID: 13
- time: 149s Source cell ID:17 Destination cell ID 9
- time: 149s Source cell ID: 4 Destination cell ID 5

- time: 155s Source cell ID: 9 Destination cell ID 13
- time: 157s Source cell ID: 6 Destination cell ID9
- time: 157s Source cell ID:16 Destination cell ID 8
- time: 158s Source cell ID:16 Destination cell ID 12
- time: 158s Source cell ID:16 Destination cell ID 12
- time: 160s Source cell ID: 3 Destination cell ID 11
- time: 161s Source cell ID:19 Destination cell ID 7
- time: 161s Source cell ID:8 Destination cell ID7
- time: 165s Source cell ID: 4 Destination cell ID8
- time: 170s Source cell ID: 6 Destination cell ID: 18
- time: 171s Source cell ID:13 Destination cell ID9
- time: 172s Source cell ID: 5 Destination cell ID4
- time: 176s Source cell ID:1 Destination cell ID 9
- time: 178s Source cell ID:18 Destination cell ID 6
- time: 180s Source cell ID: 9 Destination cell ID 13
- time: 181s Source cell ID:10 Destination cell ID 6
- time: 184s Source cell ID:8 Destination cell ID4
- time: 187s Source cell ID: 7 Destination cell ID 1
- time: 187s Source cell ID: 9 Destination cell ID 6
- time: 187s Source cell ID: 4 Destination cell ID 5
- time: 198s Source cell ID:17 Destination cell ID 13
- time: 199s Source cell ID: 9 Destination cell ID 6
- time: 201s Source cell ID: 6 Destination cell ID9
- time: 205s Source cell ID: 8 Destination cell ID 16
- time: 210s Source cell ID: 1 Destination cell ID 7
- time: 214s Source cell ID: 7 Destination cell ID 1
- time: 214s Source cell ID:15 Destination cell ID:19
- time: 217s Source cell ID: 6 Destination cell ID9
- time: 217s Source cell ID: 6 Destination cell ID 10
- time: 223s Source cell ID:13 Destination cell ID 9
- time: 225s Source cell ID: 3 Destination cell ID 10
- time: 225s Source cell ID: 4 Destination cell ID 1
- time: 230s Source cell ID: 2 Destination cell ID 11
- time: 233s Source cell ID:19 Destination cell ID 15
- time: 237s Source cell ID:11 Destination cell ID 7
- time: 240s Source cell ID:18 Destination cell ID9
- time: 242s Source cell ID:1 Destination cell ID8
- time: 242s Source cell ID:12 Destination cell ID 16

- time: 242s Source cell ID: 3 Destination cell ID 2
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- time: 332s Source cell ID: 4 Destination cell ID9
- time: 333s Source cell ID:13 Destination cell ID 4
- time: 338s Source cell ID: 2 Destination cell ID 1
- time: 339s Source cell ID:18 Destination cell ID9
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- time: 402s Source cell ID :13 Destination cell ID 5
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- time: 410s Source cell ID: 5 Destination cell ID: 13
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- time: 413s Source cell ID:17 Destination cell ID 13
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- time: 482s Source cell ID:18 Destination cell ID 14
- time: 483s Source cell ID: 9 Destination cell ID 18
- time: 486s Source cell ID: 4 Destination cell ID 1
- time: 488s Source cell ID: 6 Destination cell ID 1
- time: 490s Source cell ID:10 Destination cell ID 3
- time: 493s Source cell ID: 7 Destination cell ID8
- time: 497s Source cell ID:14 Destination cell ID 18
- time: 499s Source cell ID: 5 Destination cell ID4
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- time: 500s Source cell ID:17 Destination cell ID 9
- time: 503s Source cell ID: 2 Destination cell ID 1
- time: 503s Source cell ID:19 Destination cell ID 7
- time: 509s Source cell ID:12 Destination cell ID 4
- time: 510s Source cell ID: 4 Destination cell ID 5
- time: 511s Source cell ID: 8 Destination cell ID 1
- time: 512s Source cell ID: 3 Destination cell ID 11
- time: 520s Source cell ID:1 Destination cell ID 6
- time: 527s Source cell ID: 4 Destination cell ID 12
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- time: 555s Source cell ID:5 Destination cell ID4
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- time: 556s Source cell ID:17 Destination cell ID 9
- time: 557s Source cell ID:1 Destination cell ID 9
- time: 562s Source cell ID:5 Destination cell ID 12
- time: 563s Source cell ID:13 Destination cell ID 4
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- time: 563s Source cell ID: 2 Destination cell ID 1
- time: 567s Source cell ID: 9 Destination cell ID 17
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- time: 571s Source cell ID:8 Destination cell ID1
- time: 572s Source cell ID:6 Destination cell ID9
- time: 574s Source cell ID:10 Destination cell ID 3
- time: 576s Source cell ID: 3 Destination cell ID 11
- time: 576s Source cell ID:16 Destination cell ID 19
- time: 578s Source cell ID:15 Destination cell ID 11
- time: 580s Source cell ID:10 Destination cell ID 6
- time: 584s Source cell ID:17 Destination cell ID 9
- time: 584s Source cell ID:12 Destination cell ID 5
- time: 585s Source cell ID:1 Destination cell ID 7
- time: 585s Source cell ID: 4 Destination cell ID: 12
- time: 587s Source cell ID:19 Destination cell ID 16
- time: 587s Source cell ID: 7 Destination cell ID 15
- time: 599s Source cell ID:16 Destination cell ID:19
- time: 599s Source cell ID:16 Destination cell ID 8
- time: 601s Source cell ID:1 Destination cell ID7
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- time: 620s Source cell ID:11 Destination cell ID 15
- time: 623s Source cell ID:10 Destination cell ID 2
- time: 626s Source cell ID:5 Destination cell ID 12
- time: 630s Source cell ID:11 Destination cell ID 3
- time: 630s Source cell ID:1 Destination cell ID 2
- time: 633s Source cell ID: 6 Destination cell ID9
- time: 636s Source cell ID: 4 Destination cell ID 1
- time: 642s Source cell ID: 8 Destination cell ID 16
- time: 650s Source cell ID:4 Destination cell ID9
- time: 652s Source cell ID :9 Destination cell ID 4
- time: 653s Source cell ID:15 Destination cell ID 11
- time: 656s Source cell ID:12 Destination cell ID 4
- time: 662s Source cell ID:14 Destination cell ID 6
- time: 667s Source cell ID: 4 Destination cell ID 12
- time: 674s Source cell ID:13 Destination cell ID 17
- time: 674s Source cell ID: 4 Destination cell ID 1
- time: 679s Source cell ID: 2 Destination cell ID3
- time: 681s Source cell ID:15 Destination cell ID 19
- time: 681s Source cell ID:12 Destination cell ID 4
- time: 681s Source cell ID: 2 Destination cell ID: 10
- time: 683s Source cell ID:13 Destination cell ID 9
- time: 687s Source cell ID: 7 Destination cell ID: 1
- time: 689s Source cell ID: 6 Destination cell ID 14
- time: 691s Source cell ID: 9 Destination cell ID: 1
- time: 693s Source cell ID: 7 Destination cell ID: 19
- time: 694s Source cell ID: 2 Destination cell ID 3
- time: 697s Source cell ID: 9 Destination cell ID 6
- time: 698s Source cell ID: 2 Destination cell ID 7
- time: 701s Source cell ID :1 Destination cell ID 7
- time: 702s Source cell ID :1 Destination cell ID 9
- time: 702s Source cell ID :1 Destination cell ID 4
- time: 708s Source cell ID :7 Destination cell ID 1
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- time: 708s Source cell ID :9 Destination cell ID 4
- time: 708s Source cell ID :14 Destination cell ID 10
- time: 713s Source cell ID:14 Destination cell ID:18
- time: 713s Source cell ID:15 Destination cell ID 19
- time: 716s Source cell ID:4 Destination cell ID 1

- time: 720s Source cell ID:11 Destination cell ID 3
- time: 731s Source cell ID:12 Destination cell ID 16
- time: 731s Source cell ID: 3 Destination cell ID 10
- time: 735s Source cell ID:19 Destination cell ID8
- time: 735s Source cell ID:1 Destination cell ID4
- time: 735s Source cell ID:10 Destination cell ID 6
- time: 737s Source cell ID: 9 Destination cell ID 13
- time: 739s Source cell ID:12 Destination cell ID8
- time: 739s Source cell ID:16 Destination cell ID 12
- time: 745s Source cell ID:8 Destination cell ID7
- time: 745s Source cell ID:6 Destination cell ID9
- time: 745s Source cell ID: 3 Destination cell ID 10
- time: 749s Source cell ID:1 Destination cell ID 7
- time: 750s Source cell ID: 3 Destination cell ID 11
- time: 751s Source cell ID:18 Destination cell ID 6
- time: 754s Source cell ID:19 Destination cell ID 15
- time: 756s Source cell ID:12 Destination cell ID 16
- time: 758s Source cell ID: 6 Destination cell ID: 18
- time: 777s Source cell ID:16 Destination cell ID 12
- time: 779s Source cell ID: 9 Destination cell ID1
- time: 780s Source cell ID:10 Destination cell ID 3
- time: 786s Source cell ID: 9 Destination cell ID 6
- time: 803s Source cell ID: 6 Destination cell ID: 14
- time: 803s Source cell ID: 6 Destination cell ID 2
- time: 803s Source cell ID: 6 Destination cell ID: 1
- time: 804s Source cell ID:19 Destination cell ID 16
- time: 809s Source cell ID:1 Destination cell ID7
- time: 809s Source cell ID: 7 Destination cell ID 1
- time: 816s Source cell ID:18 Destination cell ID 6
- time: 817s Source cell ID: 4 Destination cell ID: 1
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- time: 836s Source cell ID:1 Destination cell ID7
- time: 837s Source cell ID:17 Destination cell ID 13
- time: 840s Source cell ID: 7 Destination cell ID 2
- time: 841s Source cell ID: 9 Destination cell ID 17
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time: 845s Source cell ID:19 Destination cell ID 7 time: 845s Source cell ID: 2 Destination cell ID 6 time: 846s Source cell ID:1 Destination cell ID4 time: 847s Source cell ID: 2 Destination cell ID 7 time: 848s Source cell ID: 7 Destination cell ID 2 time: 848s Source cell ID: 1 Destination cell ID 9 time: 849s Source cell ID:13 Destination cell ID9 time: 850s Source cell ID: 7 Destination cell ID8 time: 853s Source cell ID: 2 Destination cell ID 7 time: 855s Source cell ID:11 Destination cell ID 3 time: 862s Source cell ID: 3 Destination cell ID 2 time: 866s Source cell ID: 8 Destination cell ID: 19 time: 870s Source cell ID:10 Destination cell ID 3 time: 871s Source cell ID: 7 Destination cell ID 2 time: 871s Source cell ID: 7 Destination cell ID: 1 time: 875s Source cell ID:12 Destination cell ID 5 time: 877s Source cell ID:19 Destination cell ID 16 time: 881s Source cell ID:14 Destination cell ID 6 time: 883s Source cell ID: 6 Destination cell ID: 14 time: 884s Source cell ID: 6 Destination cell ID: 10 time: 886s Source cell ID:16 Destination cell ID 12 time: 891s Source cell ID: 4 Destination cell ID: 12 time: 895s Source cell ID: 8 Destination cell ID: 16

#### My criteria:

First, if a user walk into another cell(determined by 六角形的外接圓半徑,which is 250m), then calculate uplink SINR of original BS and the other BS. If uplink SINR of the BS a user walk in is higher than the original one, then handover occur. Otherwise, a user still connect to the original BS.

### **B-4**

### 358

(Generally, it is fluctuating between about 400 and 300)

(if we simply handover depend on distance between a user and BS without considering SINR, then the number will be about 600)