|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **BD**  **(%)** | **LUD a** | **LUS b** | **LHU (m)** | **DOU c** | **GOP**  **(m2)** | **ROB**  **d** | **SR**  **(%)** | **ALU**  **(m)** | **AR** | **LOS**  **(m)** | **SW**  **(m)** | **UNF**  **e** | **CO** | **CE** | **A**  **(m)** | **AOGS**  **(m)** | **SOGS(m2)** | **DOGS**  **f** | **DOBE**  **(%)** |
| 1 | 560 | M | C | 2145-3538 | LC | 1068-1715 | VH | 2-40.1 | 1893-2635 | 3.95-4.89 | 1178-1879 | 23.6-36.8 | DOT | 2.2-2.4 | 0.000147-0.000295 | 0-460 | 950-1900 | 0-11200 | Re | 460-540 |
| 2 | 450 | M | C | 1841-3538 | C | 135-197 | L | 2-8.2 | 555-1401 | 1.17-2.17 | 5240-7411 | 17.2-23.5 | GN | 2.6-2.8 | 0.000147-0.000295 | 0-150 | 0-1430 | 0-11200 | Re | 320-400 |
| 3 | 460 | VL | C | 855-1513 | C | 2586-4521 | VH | 20.2-40.8 | 0-555 | .4-1.17 | 308-861 | 9.4-13.9 | DOT | 2.2-2.4 | 0.000238-0.000295 | 0-410 | 0-470 | 100000-200000 | Ra | 460-540 |
| 4 | 250 | L | N | 855-2446 | R | 2586-4521 | VH | 10-60.4 | 0-555 | 3.95-4.89 | 1178-1879 | 17.2-23.5 | R | 2.6-2.8 | 0.000238-0.000295 | 0-410 | 0-470 | 500000-100000 | Re | 240-300 |
| 5 | 200 | L | FC | 0-855 | C | 634-1068 | VH | 2-50.8 | 1401-2635 | 2.17-3.95 | 2687-4251 | 9.4-13.9 | GN | 2.8-3 | 0.000238-0.000295 | 0-410 | 0-950 | 0-11200 | Re | 80-120 |
| 6 | 120 | VL | FC | 2895-3538 | D | 1715-2586 | VH | 2-40.1 | 0-1401 | .4-1.17 | 0-307 | 8-9.3 | R | 2.8-3 | 0.000238-0.000295 | 0-680 | 950-1900 | 100000-200000 | Ra | 80-120 |
| 7 | 180 | H | C | 1187-2145 | LC | 135-197 | VL | 10.1-60.2 | 0-950 | .4-1.17 | 1178-1879 | 9.4-13.9 | GN | 2.4-2.6 | 0.000238-0.000295 | 0-260 | 470-1430 | 0-11200 | Ra | 80-120 |
| 8 | 110 | L | C | 855-1513 | C | 2586-4521 | M | 2-10.4 | 555-1401 | .4-1.17 | 0-307 | 9.4-13.9 | GN | 3-3.2 | 0.000147-0.000295 | 0-260 | 0-470 | 0-11200 | Cl | 80-120 |
| 9 | 200 | L | FC | 1513-2446 | C | 336-634 | H | 30.1-50.8 | 0-950 | .4-1.17 | 862-1177 | 14-17.1 | R | 2.4-2.6 | 0.000147-0.000295 | 0-410 | 0-470 | 100000-200000 | Cl | 80-120 |
| 10 | 300 | M | C | 0-1187 | LC | 244-336 | M | 10.2-40.5 | 555-1893 | .4-1.17 | 1880-2686 | 14-17.1 | GN | 2.6-2.8 | 0.000238-0.000295 | 0-410 | 0-900 | 0-11200 | Cl | 140-240 |
| 11 | 360 | VH | C | 855-2446 | C | 336-634 | L | 2-20.8 | 0-1401 | .4-1.17 | 7412-10102 | 17.2-23.5 | GN | 3-3.2 | 0.000238-0.000295 | 0-260 | 0-950 | 0-11200 | Ra | 320-400 |
| 12 | 300 | VH | C | 2895-3538 | LC | 336-634 | M | 2-30.4 | 555-1401 | 1.17-2.17 | 2687-4251 | 9.4-13.9 | DOT | 2.2-2.4 | 0.000147-0.000295 | 0-260 | 2380-3330 | 0-11200 | Ra | 240-300 |
| 13 | 360 | M | FC | 0-855 | C | 135-197 | VL | 10.7-40.1 | 555-1401 | 1.17-2.17 | 1880-2686 | 14-17.1 | GN | 3-3.2 | 0.000238-0.000295 | 0-150 | 0-470 | 0-11200 | Ra | 320-400 |
| 14 | 280 | VH | C | 0-855 | C | 244-336 | VL | 6.8-30.1 | 0-950 | 1.17-2.17 | 1880-2686 | 9.4-13.9 | GN | 3-3.2 | 0.000147-0.000295 | 0-150 | 0-470 | 0-11200 | Cl | 240-300 |
| 15 | 420 | M | C | 1841-2895 | D | 135-197 | VL | 2-30.8 | 950-1893 | 1.17-2.17 | 4252-5239 | 14-17.1 | GN | 2.4-2.6 | 0.000238-0.000295 | 0-260 | 0-950 | 0-11200 | Ra | 320-400 |
| 16 | 600 | M | C | 1841-3538 | LC | 634-1068 | H | 10-40.8 | 1401-2635 | 3.95-4.89 | 0-307 | 9.4-13.9 | DOT | 2.8-3 | 0.000238-0.000295 | 0-680 | 470-1430 | 0-11200 | Ra | 460-540 |
| 17 | 180 | M | IC | 0-855 | C | 634-1068 | M | 2-20.5 | 1401-2635 | 1.17-2.17 | 2687-4251 | 14-17.1 | DOT | 2.6-2.8 | 0.000147-0.000295 | 0-260 | 0-950 | 27000-45000 | Cl | 140-240 |
| 18 | 180 | VL | C | 1513-2895 | HC | 1068-1715 | L | 2-30.2 | 555-2635 | .2-.4 | 5240-7411 | 17.2-23.5 | GN | 2.6-2.8 | 0.000238-0.000295 | 0-680 | 470-1900 | 0-11200 | Cl | 80-120 |
| 19 | 120 | L | C | 2895-3538 | D | 4521-9515 | M | 2-30.4 | 555-2635 | .4-1.17 | 5240-7411 | 17.2-23.5 | R | 2.4-2.6 | 0.000139-.000146 | 0-680 | 2800-4200 | 0-11200 | Cl | 80-120 |
| 20 | 200 | M | C | 855-1513 | C | 336-634 | L | 2-20.1 | 555-1401 | .4-1.17 | 308-861 | 17.2-23.5 | GN | 2.8-3 | 0.000238-0.000295 | 0-260 | 0-1430 | 0-11200 | Ra | 140-240 |
| 21 | 180 | L | IC | 855-1513 | C | 634-1068 | VL | 2-20.6 | 950-1401 | 1.17-2.17 | 308-861 | 17.2-23.5 | DOT | 2.6-2.8 | 0.000147-0.000295 | 0-150 | 0-470 | 0-11200 | Cl | 140-240 |
| 22 | 180 | M | N | 2895-3538 | HC | 1715-2586 | H | 10.8-60.2 | 0-1401 | 2.17-3.95 | 1880-2686 | 9.4-13.9 | R | 2.8-3 | 0.000238-0.000295 | 0-410 | 1430-2380 | 100000-200000 | Ra | 80-120 |

a VH: Very High, H: High, M: Moderate, L: Low, VL: Very Low

b FC: Fully Compatible, C: Compatible, N: Neutral, IC: Incompatible

c HC: High Clustered, C: Clustered, LC: Low Clustered, D: Dispersed, R: Random

d VH: Very High, H: High, M: Moderate, L: Low, VL: Very Low

e GN: Grid Network, R: Random, DOT: Double Tree

f Re: Regular, Ra: Random, Cl: Clustered

**توضیحات:**

مطابق جدول بالا 22 شی (منطقه شهری) که هر کدام 20 ویژگی دارند موجود میباشند. مقادیر هر کدام از ویژگیها مشخص شده است.

**هدف:**

خوشه بندی این مناطق است.

**مواردی که نیاز هست در گزارش بیاید:**

1. توضیحات مراحل انجام کار
2. دلیل انتخاب الگوریتم
3. دلیل انتخاب نوع فاصله برای انداز­گیری شباهتها
4. بررسی انتخاب بهینه خوشه ها با استفاده از شاخص­های مختلف (مانند دیوس بولدین، و....)
5. اعتبارسنجی مدل خوشه بندی با استفاده از شاخص هایی مانند Rsquare
6. مواردی مانند واریانس هر خوشه، مرکز آن و دیگر اعداد و ارقام آماری خوشه­ها