|  |
| --- |
| ***Test case :***  ***Polygon=[(4,17),(4,17),(5,16),(5,16),(7,14),(4,11),(2,13),(1,14);(-7,17),(-3,13),(-2,12),(-4,10);(-8,13),(-4,10),(-5,5),(-11,5),(-12,10);(11,7),(11,7),(13,11),(13,11),(8,11),(-2,8),(-12,-3),(-12,-3),(6,4),(13,4);(1,7),(-4,4),(-6,-4),(5,2);(-4,4),(3,4),(6,-4),(-6,-4);(-4,2),(-1,2),(2,2),(2,0),(2,-2),(-4,-2);(7,-8),(9,-7),(11,-6),(11,-6),(6,-4);(4,11),(2,6),(4,6),(6,6);(2,11),(4,11),(6,11),(6,6),(4,6),(2,6)]*** |

|  |  |
| --- | --- |
| ***operation*** | ***output*** |
| **Number\_Polygons** | **10** |
| **Total\_Number\_Points** | **56** |
| **Minimum\_X** | **-12** |
| **Maximum\_X** | **13** |
| **Minimum\_Y** | **-8** |
| **Maximum\_Y** | **17** |
| **Enclosing\_Rectangle** | **(-12,17),(13,17),(13,-8),(-12,-8)** |
| **Total\_Redundant\_Points** | **15** |
| **Polygon\_Points** 3 | **(-8,13),(-4,10),(-5,5),(-11,5),(-12,10)** |
| **Point\_Polygons** (4,11) | **1,9,10** |
| **List\_Polygons\_Points More** 4 | **3,4** |
| **List\_Polygons\_Points Less** 4 | **2,8,9** |
| **List\_Polygons\_Points Equal** 5 | **3** |
| **List\_Points\_Polygons More** 2 | **(4,11)** |
| **List\_Points\_Polygons Less** 3 | **(4,17),(5,16),(7,14),(2,13),(1,14),(-3,13),(-2,12),(-4,10),(13,11),(8,11),(-2,8),(-12,-3),(6,4),(13,4),(-4,4),(-6,-4),(5,2),(3,4),(6,-4),(-1,2),(2,2),(2,0),(2,-2),(-4,-2),(9,-7),(11,-6),(2,6),(4,6),(6,6)** |
| **List\_Points\_Polygons Equal** 2 | **(-4,10),(-4,4),(-6,-4),(6,-4),(2,6),(4,6),(6,6)** |
| **Polygon\_Perimeter** 1 | **16.9706** |
| **List\_Triangles** | **2,8,9** |
| **List\_Rectangles** | **1,7,10** |
| **List\_Trapezoid** | **6** |
| **Inside\_Rectangle (14,12),(-14,11),(-14,-5),(14,-5)** | **4,5,6,7,9,10** |
| **Inside\_Circle (0,0),10** | **5,6,7** |
| **Polygon\_Area 4** | **131** |
| **Polygons\_Area\_Range 20,130** | **3,5,6,7,10** |