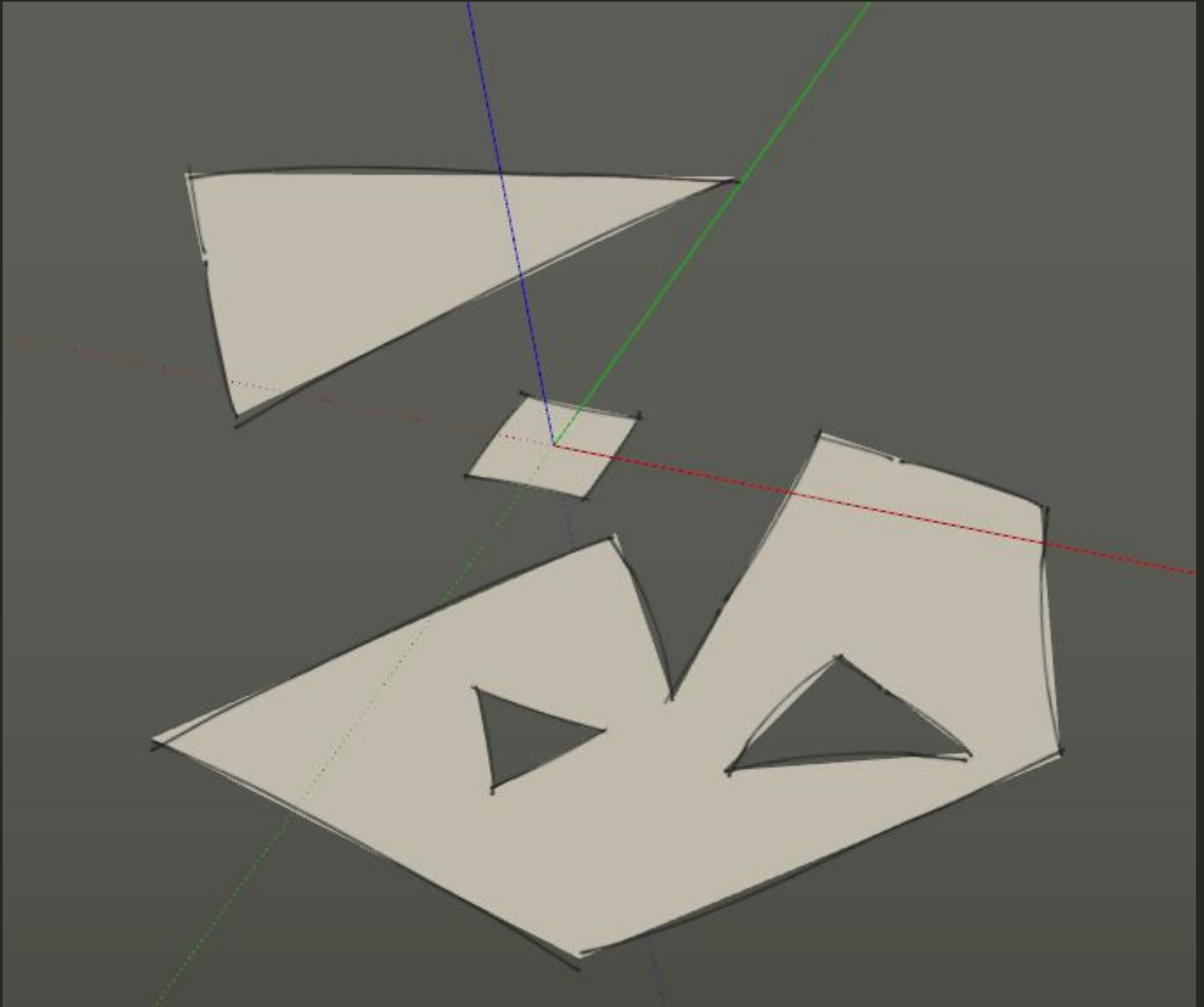Requirements:
- Attempt this question using your favourite programming language
- Solutions involving multiple languages are acceptable
- Keep your solution as simple as possible
- Submit your source code

Question Description:
- Determine the centroid (centre of mass) of each shape
- The shapes are visualised in the following image:

Expected Output:

```
>>> [ print result to console ]
12F98894F90 => ???.??|-???.??
12F988617F8 => -???.??|???.??
12F98837FC0 => 0.00|0.00
```

Input Data:

```json
{
  "faces": [
    {
      "id": "12F98894F90", "type": "face",
      "outer_loop": "12F984586AC", "inner_loops": [ "12F98458698", "12F98458684" ]
    },
    { "id": "12F988617F8", "type": "face", "outer_loop": "12F983717E8", "inner_loops": [] },
    { "id": "12F98837FC0", "type": "face", "outer_loop": "12F983716D0", "inner_loops": [] }
  ],
  "loops": [
    {
      "id": "12F984586AC", "type": "loop",
      "vertices": [
        "12F986C59E4", "12F986C59F8", "12F986C59A8", "12F986C596C",
        "12F986C5944", "12F986C591C", "12F986C58F4"
      ]
    },
    { "id": "12F98458698", "type": "loop", "vertices": [ "12F984D3230", "12F984D321C", "12F984D31F4" ] },
    { "id": "12F98458684", "type": "loop", "vertices": [ "12F98482218", "12F98482204", "12F984821DC" ] },
    { "id": "12F983717E8", "type": "loop", "vertices": [ "12F986C58B8", "12F986C58A4", "12F986C587C" ] },
    {
      "id": "12F983716D0", "type": "loop",
      "vertices": [ "12F986F4BA4", "12F986F5784", "12F986C582C", "12F986C5804" ]
    }
  ],
  "vertices":[
    { "id": "12F986C59E4", "type": "vertex", "position": "91.47|-80.58" },
    { "id": "12F986C58F4", "type": "vertex", "position": "-132.28|-368.21" },
    { "id": "12F986C591C", "type": "vertex", "position": "246.54|-464.4" },
    { "id": "12F986C5944", "type": "vertex", "position": "492.69|-206.52" },
    { "id": "12F986C596C", "type": "vertex", "position": "392.65|41.1" },
    { "id": "12F986C59A8", "type": "vertex", "position": "197.71|73.93" },
    { "id": "12F986C59F8", "type": "vertex", "position": "207.19|-231.06" },
    { "id": "12F986C58A4", "type": "vertex", "position": "-481.43|246.43" },
    { "id": "12F986C587C", "type": "vertex", "position": "-9.85|377.76" },
    { "id": "12F986C58B8", "type": "vertex", "position": "-262.49|-37.49" },
    { "id": "12F986F5784", "type": "vertex", "position": "-50.0|50.0" },
    { "id": "12F986F4BA4", "type": "vertex", "position": "-50.0|-50.0" },
    { "id": "12F986C5804", "type": "vertex", "position": "50.0|-50.0" },
    { "id": "12F986C582C", "type": "vertex", "position": "50.0|50.0" },
    { "id": "12F984D321C", "type": "vertex", "position": "306.34|-154.68" },
    { "id": "12F984D31F4", "type": "vertex", "position": "269.65|-284.8" },
    { "id": "12F984D3230", "type": "vertex", "position": "429.69|-220.14" },
    { "id": "12F98482204", "type": "vertex", "position": "66.81|-260.72" },
    { "id": "12F984821DC", "type": "vertex", "position": "123.04|-344.32" },
    { "id": "12F98482218", "type": "vertex", "position": "171.89|-274.42" }
  ]
}
```