## Create Sample OSM File

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In [1]: import xml.etree.cElementTree as ET # Use cElementTree or lxml if too slow
                         OSM_FILE = "FernCreek-Highview_Kentucky.osm" # Replace this with your osm file
                         SAMPLE_FILE = "sample.osm"
                         def get_element(osm_file, tags=('node', 'way', 'relation')):
                                       """Yield element if it is the right type of tag
                                       Reference:
                                       http://stackoverflow.com/questions/3095434/inserting-newlines-in-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-xml-file-generated-via-x
                                       context = ET.iterparse(osm_file, events=('start', 'end'))
                                       _, root = next(context)
                                      for event, elem in context:
                                                   if event == 'end' and elem.tag in tags:
                                                                yield elem
                                                                root.clear()
                         with open(SAMPLE_FILE, 'wb') as output:
                                       output.write('<?xml version="1.0" encoding="UTF-8"?>\n')
                                       output.write('<osm>\n')
                                       # Write every 10th top level element
                                       for i, element in enumerate(get_element(OSM_FILE)):
                                                    if i % 10 == 0:
                                                                output.write(ET.tostring(element, encoding='utf-8'))
                                       output.write('</osm>')
In []:
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