https://repl.it/@kurbanParkland/graph-base-chapter-14

Graph 1

Reading and storing and printing

Requirements

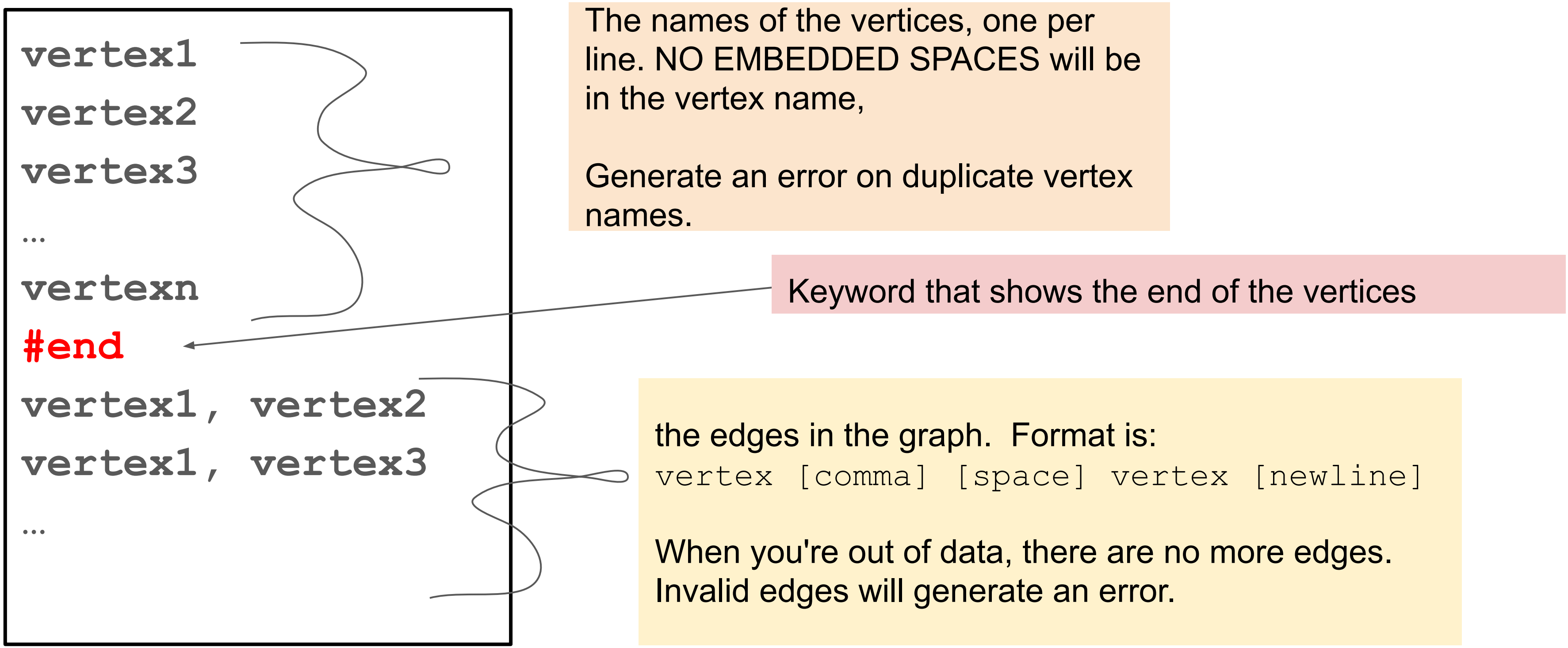
Create file in python with a **comment** containing the academic honesty pledge as shown below. Add another, separate comment to the file containing your name

- Write a python program that creates a graph using a textarea and the formatting described in a later slide
- Your code will print out the graph in the multiple ways described in later slides
- Your code should generate both the form (with a textbox) and the output.

```
# I honor Parkland's core values by affirming that I have
# followed all academic integrity guidelines for this work.

# your name
```

Input format: (This is a directed unweighted graph)



```
vertex1
vertex2
vertex3
…
vertexn
#end
vertex1, vertex2
vertex1, vertex3
…
```

The names of the vertices, one per line. NO EMBEDDED SPACES will be in the vertex name,

Generate an error on duplicate vertex names.

Keyword that shows the end of the vertices

the edges in the graph. Format is:
`vertex [comma] [space] vertex [newline]`

When you're out of data, there are no more edges.
Invalid edges will generate an error.

Required Format.

The vertex name and it's outgoing edges are in the same row.

VERTEX NAME	OUTGOING EDGES
vertex1	vertex2 vertex3
vertex2	None
vertex3	vertex4 vertex1
vertex4	vertex4

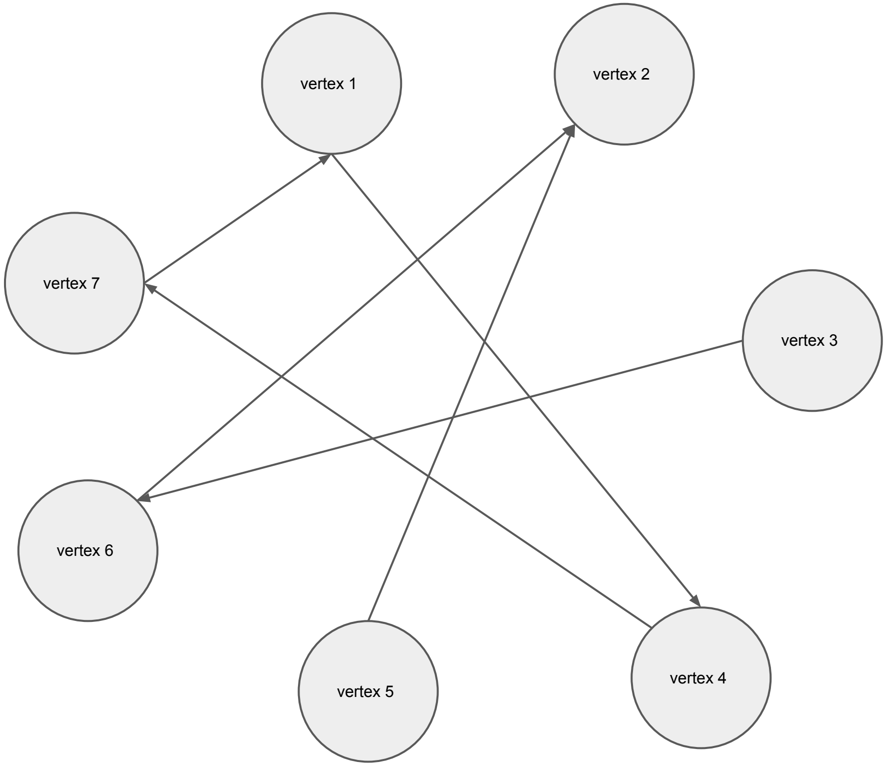
More requirement

- They keyword **#end** will separate the vertices from the edges.
- The program will report duplicate vertex names. (It can end processing on finding a duplicate)
- The program will report invalid edge names. (It can end processing on finding an invalid edge)
- Vertex names will have NO spaces.

OPTIONAL Output Format (EXTRA CREDIT)

A SVG image:

- vertices are arranged **in a circle**
- lines (arrows?)
- This will be very unreadable for large graphs.



Turn in

Your code

A link to the webpage.