**YAML**

* This is data representation format, which uses name/value pairs
* The basic format is <name>: <value>
* types of data
  + Simple/Scalar
    - Text
    - number
    - boolean
  + Complex
    - list/array
    - map/dictionary/object
* Extension of YAML files is .yaml or .yml. YAML is a text file
* Simple yaml

url: directdevops.blog

author: khaja

isDailyUpdated: true

isLoginRequired: false

articlecount: 1000

* List example

---

Colors:

- Black

- White

Movies:

- Avengers

- Batman Begins

* Map/Dictionary/object

---

Address:

flatno: 407

building: Mythrivanam

area: Ameerpet

city: Hyderabad

* yaml about Quality Thought

---

name: QualityThought

url: https://qualitythought.in

courses:

- name: Azure

faculty: khaja

duration: 90

- name: AWS

faculty: khaja

duration: 90

- name: DevOps

faculty: khaja

duration: 110

- name: Manual Testing

faculty: Ramana

duration: 60

Branches:

headoffice:

flatno: 302

building: nilgiri

city: hyderabad

devops:

flatno: 407

building: mythrivanam

city: hyderabad

* Try writing about yourself in a yaml according to following structure

---

#qualification

yearofpassing: <number>

university: <text>

grade: text (A+|A|B|C)

----

# education

<name>: <qualification>

----

name: <text>

mobile: <text>

email: <text>

education: list(<education>)

Example 1 (Postgraduate)

---

name: vishnu

mobile: '999999999'

email: vishnu@gmail.com

education:

- mtech:

yearofpassing: 2017

university: jnu

grade: A

- btech:

yearofpassing: 2015

university: jntu

grade: A+

Example (graduate – BSc)

---

name: Swathi

mobile: '88888888'

email: swathi@outlook.com

education:

- BSc:

yearofpassing: 2020

university: osmania

grade: A+

* YAML will be used to define kuberentes manifests and docker compose files

**Docker compose**

* This was external tool, but now it is integrated as docker subcommand docker compose
* Compose allows use to specify the yaml file which helps in creating the below by specifying in a yaml file
  + networks
  + volumes
  + containers
* docker compose file will have the name of docker-compose.yml
* sample

---

version: '3.9'

services:

web:

image: nginx:latest

networks:

- hello-net

volumes:

- type: volume

source: my-vol

target: /tools

networks:

hello-net:

driver: bridge

volumes:

my-vol:

* to start all the containers create a folder copy the docker-compose.yaml and execute docker compose up -d and to remove everything docker compose down.
* <https://github.com/DevProjectsForDevOps/StudentCoursesRestAPI/blob/master/docker-compose.yaml> for the compose file with instructions to run student course register which we have executed manually yesterday