- Kubernetes questions
  - How would you deploy a stateless REST API in Kubernetes? How about a stateful one?
  - Pod "A" sends a request to "my-service.my-namespace.svc": what happens behind the scenes?
  - What kind of Kubernetes object do you use to deploy a Pod on every node?

- Sysadmin questions
  - I have this YAML to list my users

```yaml
users:
  - firstname: Paul
    lastname: Jack
  - firstname: Foo
    lastname: Bar
  - {}
  - firstname: Toto
    lastname: Tata
  - firstname: Pierre
    lastname: Dupont
  - firstname: Paul
    lastname: Jack
  - null
  - firstname: Abc
    lastname: Def
```

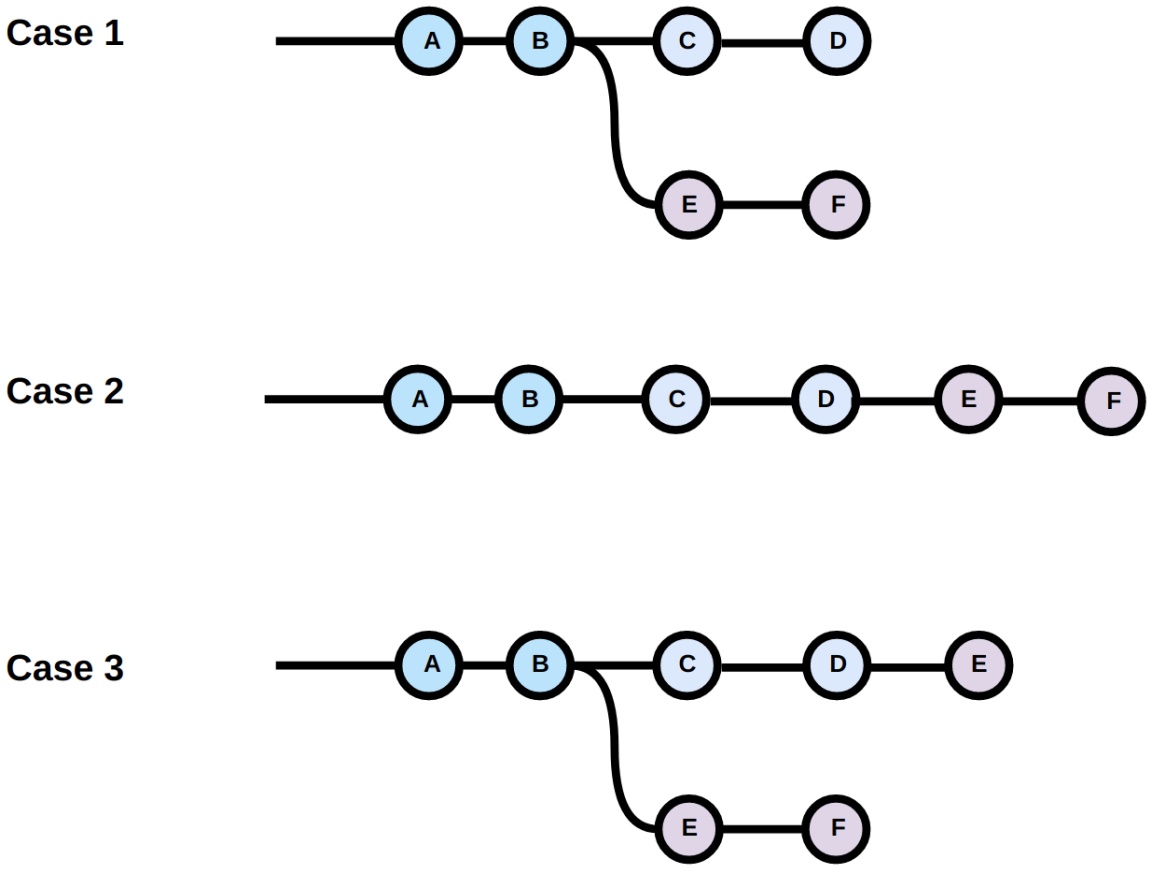
I want to compute email for them as follow (we do not care about the order)

```
toto.tata@example.com
abc.def@example.com
pierre.dupont@example.com
paul.jack@example.com
foo.bar@example.com
```

How do you do?

  - Explain two approaches to network load balancing, their benefits and drawbacks
  - What command(s) do you use to list storage devices?
  - An LVM LV is used by a process and we need to double its size. What is the procedure?

- Git questions
  - Given the following gitflow diagram



    - How to go from Case 1 to Case 2 (one git command; HEAD on F)
    - How to go from Case 1 to Case 3 (one git command; HEAD on D)

- Bonus
    - What does this code do ?

(NOTE: docstring and comments were removed on purpose)

```python
def my_function(
   devices: List[dict], count: int, toleration: float = 0.05
) -> List[dict]:
    """<redacted for the exercise>"""
    groups = []

    for device in devices:
        candidates = [
            group
            for group in groups
            if abs(group["size"] - device["size"]) < toleration * group["size"]
        ]
        if candidates:
            group = candidates[0]
            group["devices"].append(device)
            # <redacted for the exercise>
            group["size"] = sum(d["size"] for d in group["devices"]) / len(
                group["devices"]
            )
        else:
            groups.append({"size": device["size"], "devices": [device]})

    return [g for g in groups if len(g["devices"]) >= count]
```