**Exercise Guide CLO 2021**

**VirtualBox VM: https://oxclo.s3-eu-west-1.amazonaws.com/oxclo2021.ova**For the Ubuntu VM username and password **: oxclo/oxclo**

**AWS login link:**

[**https://ox-clo.signin.aws.amazon.com/console**](https://ox-clo.signin.aws.amazon.com/console)

**AWS login: oxcloXX / oxcloXX** (change password first time).

**Exercises:** [**https://freo.me/oxclo-exercises**](https://freo.me/oxclo-exercises)

| Exercise | Description |
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| 0 | Trying out the VM and using Lambda Calculus in Python |
| 1 | Getting Started with Amazon AWS / EC2 |
| 2 | Scaling an app in EC2. Userdata. |
| 3 | Elastic load-balancing in AWS |
| 4 | Simple Docker Docker-machine |
| 5 | Python, Pandas, Matplotlib |
| 6 | Apache Spark and Python  Word Count |
| 7 | Apache Spark on EC2, flintrock, Jupyter on EC2 |
| 8 | More Spark! |
| 9 | Even More Spark! |
| 10 | Basic Cassandra, Importing data via Spark |
| 11 | Understanding CQL |
| 12 | Clustering k-means |
| 13 | Stream Processing / Kappa |