

RabbitMQ Experiment 1

We will be using the command line a lot and we need to be using the correct conda environment so make sure you are working in a terminal where you have run:

```
conda activate bigDataWorkshop
```

If you aren't sure which environment you are running then you can check using the command below:

```
conda env list
```

You should see a list of environments where the current active one is marked with an asterisk like so -

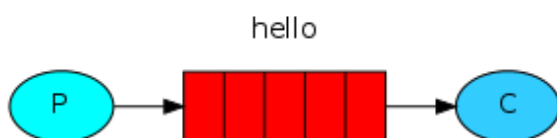
```
(bigDataWorkshop) NarwhalMacBookPro:tutorial1 abh$ conda env list
# conda environments:
#
base                                /Users/abh/.julia/packages/Conda/m7vem/deps/usr
ads_analysis38                     /Users/abh/opt/anaconda3
bigDataWorkshop                    * /Users/abh/opt/anaconda3/envs/bigDataWorkshop
bigDataWorkshop2                   /Users/abh/opt/anaconda3/envs/bigDataWorkshop2
dashboarding                       /Users/abh/opt/anaconda3/envs/dashboarding
experiments                        /Users/abh/opt/anaconda3/envs/experiments
mongo_api                         /Users/abh/opt/anaconda3/envs/mongo_api
my-pelican                         /Users/abh/opt/anaconda3/envs/my-pelican
ptm_tests                         /Users/abh/opt/anaconda3/envs/ptm_tests
yorkshire_dev                      /Users/abh/opt/anaconda3/envs/yorkshire_dev

(bigDataWorkshop) NarwhalMacBookPro:tutorial1 abh$
```

Building our first queuing system

We are going to build a very simple queuing system comprised of two simple Python programs:

1. A Producer
2. A Consumer



Our producer will send a variety of greetings to the the RabbitMQ message broker.

These will then be collected by the consumer and printed to screen.

The missing 3rd element is that we need to have the RabbitMQ messaging broker working in the background. We can launch this using Docker.

First pull the image as follows:

```
docker pull rabbitmq:3-management
```

We can then launch the system with:

```
docker run --rm -it --hostname my-rabbit -p 15672:15672 -p 5672:5672 rabbitmq:3-management
```

The port 5672 is used for connecting to the RabbitMQ client.

We can use the default username and password `guest:guest` to log on to the web monitor at port 15672.