Enable Celery in your system

1. Download and install python

I'll recommend you to download the latest version of the python and install the same

Download from https://www.python.org

2. Install Celery

Celery can be installed using pip, using the following command to install the same

```
pip install celery
```

Confirm the installations using

```
python3 --version
# should list Python 3.12.x or higher

pip freeze | grep celery
#should list celery==5.3.1 or higher
```

3. Installation of the RabbitMQ - The Broker

Celery needs a broker to run which acts as a medium of communication between the python code and celery. Many brokers can be used here, but redis and rabbitmq are the ones used often.

*For this tutorial, we'll be using **RabbitMQ** and we will be using the docker image of **RabbitMQ:Management***

3.1.1

Download and Insall the Docker form https://www.docker.com/

Verify the docker installation using the following command

```
docker -v
# should list Docker version 26.0.0 or Higher
```

3.2 Run Rabbitmq:Management Docker Image

*In the command prompt, please pull and use the image of **RbbitMQ:Management** using the following command*

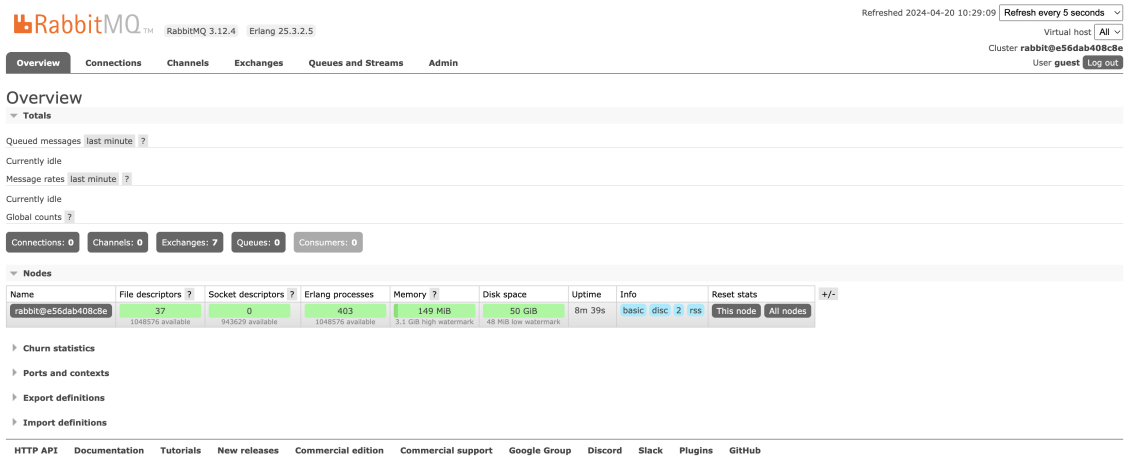
```
docker run -it --rm --name rabbitmq -p 5672:5672 -p 15672:15672
rabbitmq:3.12-management
```

To verify whether the RabbitMQ is working or not, please type http://localhost:15672/ in the browser. you should see a page like this

RabbitMQ Management

*Please provide **guest** as both username and password*

If you see a page like this, then your rabbitmq instance is working



4. Installation of the Flower - The Celery Management Tool

Install the `flower` using the following command

```
pip install flower
```

5. Running on Windows

Celery is NOT officilly supported on windows because of the `prefork pool` issue. However, for this tutorial you can use the same in windows using one of the following ways

Single threaded instance

```
python -m celery -A tasl_one worker --loglevel=INFO --pool=solo
```

Multi threaded instance

```
python -m celery -A tasl_one worker --loglevel=INFO --pool=threads --
concurreny=10
```

Using gevent

```
pip install gevent
python -m celery -A tasl_one worker --loglevel=INFO --pool=gevent
```

All the above tools are mandatory for this tutorial, you can additionally install Prometheus & Grafana but is not necessary

6. Download and Install Prometheus

`Prometheus` *is a time series database and we can use the same to monitor the status of celery tasks using the flower infrastructure*

Please download and install the same from the following link

https://prometheus.io/download/

Alternatively you can also run a docker image of the prometheus

7. Install grafana or run a docker image

`Grafana` *can be installed using the docker image as*

```
docker run -d --name=grafana -p 3000:3000 grafana/grafana
```

Now everything is available in your system to make celery work