

# CLOUD COMPUTING PRACTICAL ASSIGNMENT NO:11

Write a program for web feed. Prepare a Screen shots file and also write down the steps. Make single word or PDF file.

## 1. Launch an EC2 Instance

### 1. Log in to AWS Management Console:

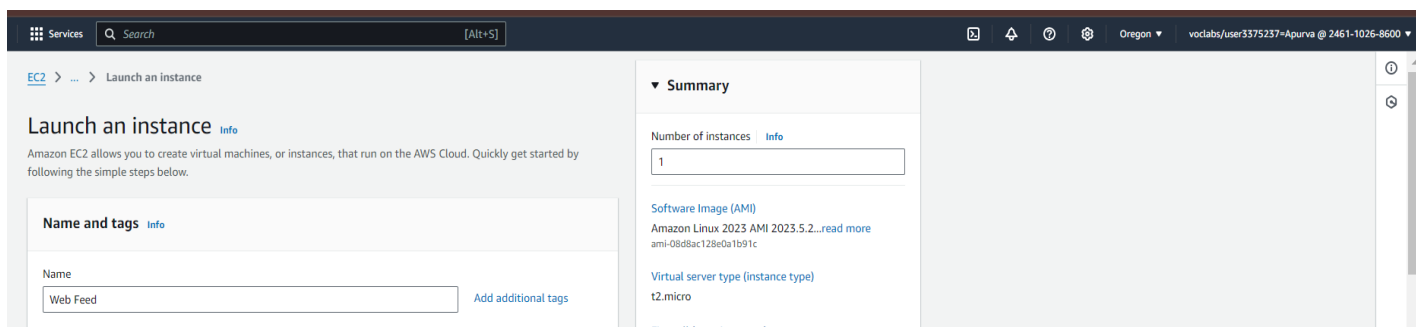
- Go to the [AWS Management Console](https://aws.amazon.com/console/) and sign in.

### 2. Search to EC2:

- In the Services search bar, type and select EC2.

### 3. Launch an Instance:

- Click on the Launch Instances button.



- Choose an Amazon Machine Image (AMI) (e.g., Amazon Linux )

▼ **Application and OS Images (Amazon Machine Image)** [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

🔍 *Search our full catalog including 1000s of application and OS images*

Recents | My AMIs | **Quick Start**

Amazon Linux  
aws


macOS  
Mac

Ubuntu  
ubuntu

Windows  
Microsoft

Red Hat  
Red Hat

SUSE Li  
SUS



**Browse more AMIs**  
Including AMIs from AWS, Marketplace and the Community

- Select an instance type (e.g., `t2.micro`) and select or create a new key pair

▼ **Instance type** [Info](#) | [Get advice](#)

Instance type

**t2.micro**  
 Family: t2   1 vCPU   1 GiB Memory   Current generation: true  
 On-Demand Linux base pricing: 0.0116 USD per Hour  
 On-Demand SUSE base pricing: 0.0116 USD per Hour  
 On-Demand Windows base pricing: 0.0162 USD per Hour  
 On-Demand RHEL base pricing: 0.026 USD per Hour

Free tier eligible

☐ All generations

[Compare instance types](#)


Additional costs apply for AMIs with pre-installed software

▼ **Key pair (login)** [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

Kanha

 [Create new key pair](#)

- Click Next: Configure Instance Details.
- Keep the default settings and click Next: Add Storage.
- Review and click Next: Add Tags.
- Click Next: Configure Security Group:
  - Add a rule to allow SSH (port 22) from your IP address.

▼ **Network settings** [Info](#) Edit

**Network** | [Info](#)  
vpc-0a895b9422fd3af22

**Subnet** | [Info](#)  
No preference (Default subnet in any availability zone)

**Auto-assign public IP** | [Info](#)  
Enable  
Additional charges apply when outside of free tier allowance

**Firewall (security groups)** | [Info](#)  
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☒ Create security group ☐ Select existing security group

We'll create a new security group called 'launch-wizard-13' with the following rules:

☒ Allow SSH traffic from Helps you connect to your instance Anywhere  
0.0.0.0/0

- Click Review and Launch.

- Click Launch Instances.

4. Wait for the Instance to be Running:

- Once the instance state is "running," you can connect to it.

ch [Alt+S] Oregon vodabs/user3375237-Apurva @ 2461-1026-8600

Instances (1) [Info](#) Last updated less than a minute ago Connect Instance state ▼ Actions ▼ Launch instances ▼

All states ▼

Instance state = running X Clear filters < 1 >

| <input type="checkbox"/> | Name <a href="#">↗</a> ▼ | Instance ID         | Instance state ▼                       | Instance type ▼ | Status check   | Alarm status | Availability Zone ▼ | Public IPv4 DNS ▼        | Public IPv4 ... ▼ | Elastic IP |
|--------------------------|--------------------------|---------------------|--|-----------------|--|--------------|---------------------|--------------------------|-------------------|------------|
| <input type="checkbox"/> | Web Feed                 | i-0a6e72cbd14801958 | <span>Running</span> <a href="#">🔍</a> | t2.micro        | <span>2/2 checks passed</span> <a href="#">View alarms +</a> |              | us-west-2b          | ec2-54-201-215-100.us... | 54.201.215.100    | -          |

## II) Connect to Your EC2 Instance

- In the EC2 Dashboard, select your instance and click to connect.

[illegible]

### III). Install Python and pip

## 1. Install Python 3:

- Run the following command to install Python 3:

```
sudo yum install python3 -y
```

```

[ec2-user@ip-172-31-21-245 ~]$ sudo su
[root@ip-172-31-21-245 ec2-user]# sudo yum install python3
Last metadata expiration check: 0:05:09 ago on Thu Oct  3 08:53:22 2024.
Package python3-3.9.16-1.amzn2023.0.9.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-21-245 ec2-user]# yum install python3-pip
Last metadata expiration check: 0:05:32 ago on Thu Oct  3 08:53:22 2024.
Dependencies resolved.

=====
Package                                Architecture      Version           Size              Repository
=====
Installing:
python3-pip                            noarch            21.3.1-2.amzn2023.0.7  1.8 M             amazonlinux
Installing weak dependencies:

```

| Package                       | Architecture | Version               | Repository  | Size  |
|-------------------------------|--------------|-----------------------|-------------|-------|
| Installing:                   |              |                       |             |       |
| python3-pip                   | noarch       | 21.3.1-2.amzn2023.0.7 | amazonlinux | 1.8 M |
| Installing weak dependencies: |              |                       |             |       |

## 2. Install pip for Python 3:

- Install pip using:

`sudo yum install python3-pip -y`

```
[root@ip-172-31-21-245 ec2-user]# yum install python3-pip
Last metadata expiration check: 0:05:32 ago on Thu Oct 3 08:53:22 2024.
Dependencies resolved.

=====
Package                                Architecture      Version           Repository
=====
Installing:
python3-pip                            noarch            21.3.1-2.amzn2023.0.7  amazonlinux
Installing weak dependencies:
libxcrypt-compat                       x86_64            4.4.33-7.amzn2023      amazonlinux

Transaction Summary

Install 2 Packages
```

#### IV) Install the Feedparser Library

- Install the `feedparser` library using pip:

`pip3 install feedparser`

```
Complete!
[root@ip-172-31-21-245 ec2-user]# pip3 install feedparser
Collecting feedparser
  Downloading feedparser-6.0.11-py3-none-any.whl (81 kB)
    | 81 kB 5.0 MB/s
Collecting sgmlib3k
  Downloading sgmlib3k-1.0.0.tar.gz (5.8 kB)
  Preparing metadata (setup.py) ... done
Using legacy 'setup.py install' for sgmlib3k, since package 'wheel' is not installed.
Installing collected packages: sgmlib3k, feedparser
  Running setup.py install for sgmlib3k ... done
Successfully installed feedparser-6.0.11 sgmlib3k-1.0.0
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting beh
is/warnings/you
```

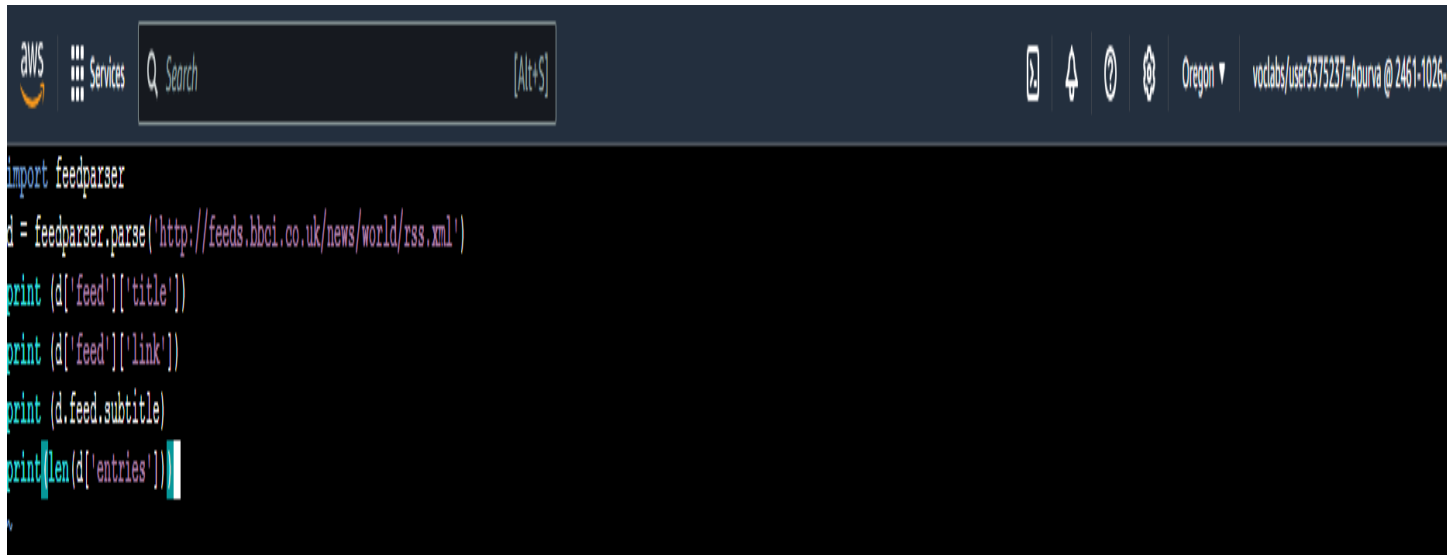
#### V) Write the Web Feed Program

##### 1. Create a Python File:

- Use a text editor like `vi` to create a new file:

`vi demo.py`

##### 2. Add the Following Code:



The screenshot shows an AWS CloudShell terminal window. The top bar includes the AWS logo, a 'Services' button, a search bar with the placeholder text 'Search' and a '[Alt+S]' shortcut, and a row of icons for file management and help. On the right side of the top bar, it displays 'Oregon' with a dropdown arrow and the user information 'vodlabs/user3375237-Apurna @ 2461-1026'. The terminal area has a dark background with light blue text. The code being entered is as follows:

```
import feedparser
d = feedparser.parse('http://feeds.bbci.co.uk/news/world/rss.xml')
print (d['feed']['title'])
print (d['feed']['link'])
print (d.feed.subtitle)
print(len(d['entries']))
```

### 3. Save and Exit the Editor:

- Save the file and exit.

### 4. Run the Web Feed Program

- Execute the program using Python 3:

`python3 demo.py`

```
aws Services Search [Alt+S]
Verifying : libxcrypt-compat-4.4.33-7.amzn2023.x86_64
Verifying : python3-pip-21.3.1-2.amzn2023.0.7.noarch

WARNING:
A newer release of "Amazon Linux" is available.

Available Versions:

Version 2023.5.20241001:
Run the following command to upgrade to 2023.5.20241001:

dnf upgrade --releasever=2023.5.20241001

Release notes:
https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.5.20241001.html

Installed:
libxcrypt-compat-4.4.33-7.amzn2023.x86_64 python3-pip-21.3.1-2.amzn2023.0.7.noarch

Complete!
root@ip-172-31-21-245 ec2-user]# pip3 install feedparser
Collecting feedparser
  Downloading feedparser-6.0.11-py3-none-any.whl (81 kB)
    | 81 kB 5.0 MB/s
Collecting sgmlib3k
  Downloading sgmlib3k-1.0.0.tar.gz (5.8 kB)
  Preparing metadata (setup.py) ... done
Using legacy 'setup.py install' for sgmlib3k, since package 'wheel' is not installed.
Installing collected packages: sgmlib3k, feedparser
  Running setup.py install for sgmlib3k ... done
Successfully installed feedparser-6.0.11 sgmlib3k-1.0.0
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager. It is recommended to use a virtual environment instead: https://
ic/warnings/venv
root@ip-172-31-21-245 ec2-user]# vi demo.py
root@ip-172-31-21-245 ec2-user]# python3 demo.py
BBC News
https://www.bbc.co.uk/news/world
BBC News - World
7
root@ip-172-31-21-245 ec2-user]#
```