

# TUGAS PROGRAM STUDI INDEPENDEN

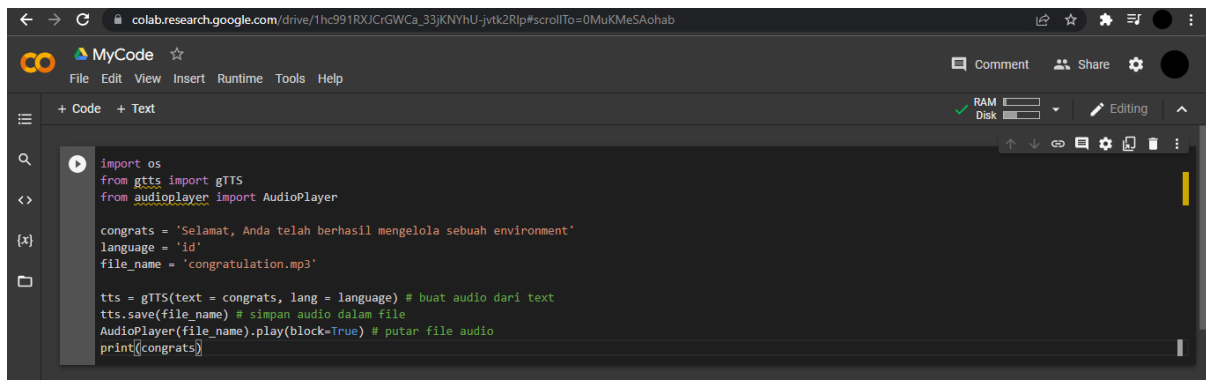
## ORBIT FUTURE ACADEMY

### Identitas

1. Nama : Diana Eka Riyani
2. NIM : 24010119140041
3. Asal Kampus : Universitas Diponegoro
4. Kelas : Jupyter XXI
5. Coach : Angel Metanosa Afinda
6. Program : Foundations of AI and Life Skills for Gen-Z
7. Hari, Tanggal : Jumat, 11 Maret 2022

### Langkah-Langkah Tugas Materi SnakeCage

1. Membuat program yang sudah ditentukan menggunakan Colab dan menyimpan atau mendownload program tersebut bernama “MyCode” dengan format “.py”

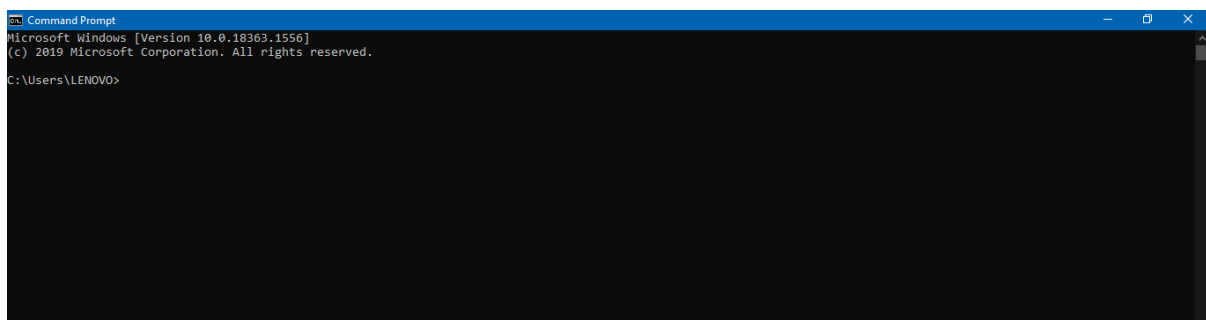


```
import os
from gtts import gTTS
from audioplayer import AudioPlayer

congrats = 'Selamat, Anda telah berhasil mengelola sebuah environment'
language = 'id'
file_name = 'congratulation.mp3'

tts = gTTS(text = congrats, lang = language) # buat audio dari text
tts.save(file_name) # simpan audio dalam file
AudioPlayer(file_name).play(block=True) # putar file audio
print(congrats)
```

2. Membuka Conda yang bisa digunakan melalui terminal (command prompt)



```
Microsoft Windows [Version 10.0.18363.1556]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\LENOVO>
```

3. Membuat environment yang bernama “SnakeCage” dengan Python versi 3.8 dengan mengetik “conda create --name SnakeCage python=3.8”

```
Command Prompt - conda install pip - conda activate base - conda deactivate - conda activate base
C:\Users\LENOVO>conda create --name SnakeCage python=3.8
WARNING: A directory already exists at the target location 'C:\Users\LENOVO\anaconda3\envs\SnakeCage'
but it is not a conda environment.
Continue creating environment (y/[n])? y

Collecting package metadata (current_repodata.json): done
Solving environment: done

==> WARNING: A newer version of conda exists. <==
  current version: 4.10.3
  latest version: 4.11.0

Please update conda by running

  $ conda update -n base -c defaults conda

## Package Plan ##

  environment location: C:\Users\LENOVO\anaconda3\envs\SnakeCage

added / updated specs:
- python=3.8

The following packages will be downloaded:

package----- build-----
certifi-2021.10.8 py38haa95532_2 152 KB
python-3.8.12 h6244533_0 16.0 MB
wheel-0.37.1 pyhd3eb1b0_0 33 KB
-----
Total: 16.2 MB
```

```
Command Prompt - conda install pip - conda activate base - conda deactivate - conda activate base

The following NEW packages will be INSTALLED:

ca-certificates pkgs/main/win-64::ca-certificates-2022.2.1-haa95532_0
certifi pkgs/main/win-64::certifi-2021.10.8-py38haa95532_2
openssl pkgs/main/win-64::openssl-1.1.1m-h2b6ff1b_0
pip pkgs/main/win-64::pip-21.2.2-py38haa95532_0
python pkgs/main/win-64::python-3.8.12-h6244533_0
setuptools pkgs/main/win-64::setuptools-58.0.4-py38haa95532_0
sqlite pkgs/main/win-64::sqlite-3.38.0-h2b6ff1b_0
vc pkgs/main/win-64::vc-14.2-h21ff451_1
vs2015_runtime pkgs/main/win-64::vs2015_runtime-14.27.29016-h5e58377_2
wheel pkgs/main/noarch::wheel-0.37.1-pyhd3eb1b0_0
wincertstore pkgs/main/win-64::winertstore-0.2-py38haa95532_2

Proceed ([y]/n)? y

Downloading and Extracting Packages
wheel-0.37.1 33 KB ##### 100%
python-3.8.12 16.0 MB ##### 100%
certifi-2021.10.8 152 KB ##### 100%
Preparing transaction: done
Verifying transaction: done
Executing transaction: done

#
# To activate this environment, use
#
#     $ conda activate SnakeCage
#
# To deactivate an active environment, use
#
#     $ conda deactivate
```

4. Mengaktifkan environment SnakeCage dengan mengetik “conda active SnakeCage”

```
Command Prompt - conda install pip - conda activate base - conda deactivate - conda activate base

C:\Users\LENOVO>conda activate SnakeCage
```

5. Menginstall pip dengan mengetik “conda install pip”

```
Command Prompt - conda install pip - conda activate base - conda deactivate - conda activate base

(SnakeCage) C:\Users\LENOVO>conda install pip
Collecting package metadata (current_repodata.json): done
Solving environment: done

==> WARNING: A newer version of conda exists. <==
  current version: 4.10.3
  latest version: 4.11.0

Please update conda by running

  $ conda update -n base -c defaults conda

# All requested packages already installed.
```

6. Menginstall package gtts dalam environment SnakeCage dengan mengetik “pip install gtts”

```
Command Prompt - conda install pip - conda activate base - conda deactivate - conda activate base
(SnakeCage) C:\Users\LENOVO>pip install gtts
Collecting gtts
  Using cached gTTS-2.2.3-py3-none-any.whl (25 kB)
Collecting click
  Downloading click-8.0.4-py3-none-any.whl (97 kB)
  | 97 kB 374 kB/s
Collecting six
  Downloading six-1.16.0-py2.py3-none-any.whl (11 kB)
Collecting requests
  Downloading requests-2.27.1-py2.py3-none-any.whl (63 kB)
  | 63 kB 67 kB/s
Collecting colorama
  Downloading colorama-0.4.4-py2.py3-none-any.whl (16 kB)
Collecting idna<4,>=2.5
  Downloading idna-3.3-py3-none-any.whl (61 kB)
  | 61 kB 481 kB/s
Collecting charset-normalizer~=2.0.0
  Downloading charset-normalizer-2.0.12-py3-none-any.whl (39 kB)
Collecting urllib3<1.27,>=1.21.1
  Downloading urllib3-1.26.8-py2.py3-none-any.whl (138 kB)
  | 138 kB 1.6 MB/s
Requirement already satisfied: certifi>=2017.4.17 in c:\users\lenovo\anaconda3\envs\snakecage\lib\site-packages (from requests->gtts) (2021.10.8)
Installing collected packages: urllib3, idna, colorama, charset-normalizer, six, requests, click, gtts
Successfully installed charset-normalizer-2.0.12 click-8.0.4 colorama-0.4.4 gtts-2.2.3 idna-3.3 requests-2.27.1 six-1.16.0 urllib3-1.26.8
```

7. Menginstall package audioplayer dalam environment SnakeCage dengan mengetik “pip install audioplayer”

```
Command Prompt - conda install pip - conda activate base - conda deactivate - conda activate base
(SnakeCage) C:\Users\LENOVO>pip install audioplayer
Collecting audioplayer
  Using cached audioplayer-0.6-py3-none-any.whl (8.3 kB)
Installing collected packages: audioplayer
Successfully installed audioplayer-0.6
```

8. Membuka directory (path) program MyCode.py pada terminal dengan mengetik “C:\Users\LENOVO\Downloads”. Hal itu dikarenakan lokasi penyimpanan program berada di Downloads

```
Command Prompt - conda install pip - conda activate base - conda deactivate - conda activate base
(SnakeCage) C:\Users\LENOVO>cd "C:\Users\LENOVO\Downloads"
```

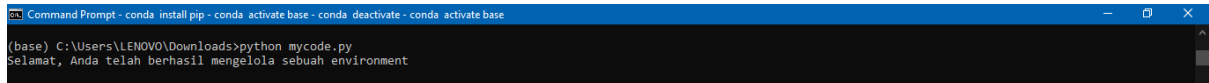
9. Menjalankan program MyCode.py melalui environment SnakeCage dengan mengetik “python mycode.py”. Lalu, program berhasil dijalankan sehingga terdengar suara dari speaker yang berbunyi “ Selamat, Anda telah berhasil mengelola sebuah environment” dan tercetak string seperti pada gambar di bawah.

```
Command Prompt - conda install pip - conda activate base - conda deactivate - conda activate base
(SnakeCage) C:\Users\LENOVO\Downloads>python mycode.py
Selamat, Anda telah berhasil mengelola sebuah environment
```

10. Selanjutnya, akan menjalankan program melalui environment base dengan mengetik “conda deactivate”. Kemudian, mengaktifkan environment base terlebih dahulu dengan mengetik “conda activate base”

```
Command Prompt - conda install pip - conda activate base - conda deactivate - conda activate base
(SnakeCage) C:\Users\LENOVO\Downloads>conda deactivate
C:\Users\LENOVO\Downloads>conda activate base
```

11. Menjalankan program MyCode.py melalui environment base dengan mengetik “python mycode.py”. Lalu, program berhasil dijalankan sehingga terdengar suara dari speaker yang berbunyi “ Selamat, Anda telah berhasil mengelola sebuah environment” dan tercetak string seperti pada gambar di bawah.

A screenshot of a Windows Command Prompt window. The title bar at the top reads "Command Prompt - conda install pip - conda activate base - conda deactivate - conda activate base". The command prompt shows the prompt "(base) C:\Users\LENOVO\Downloads>" followed by the command "python mycode.py". Below the command, the output is displayed: "Selamat, Anda telah berhasil mengelola sebuah environment".

```
Command Prompt - conda install pip - conda activate base - conda deactivate - conda activate base
(base) C:\Users\LENOVO\Downloads>python mycode.py
Selamat, Anda telah berhasil mengelola sebuah environment
```

12. Selesai.

### **Kesimpulan**

1. Dapat membuat environment.
2. Dapat menginstall package di environment.
3. Menjalankan program python di environment.
4. Program yang dijalankan dengan package tertentu di dalam suatu environment belum tentu dapat berjalan di environment yang berbeda karena package yang terinstall di dalamnya belum tentu sama.