

TUGAS MATA KULIAH

Data Mining

Dosen : Muhamad Sabar, S.T., M.T.



Disusun oleh :

Rifki Aditya Nugraha 19552011183

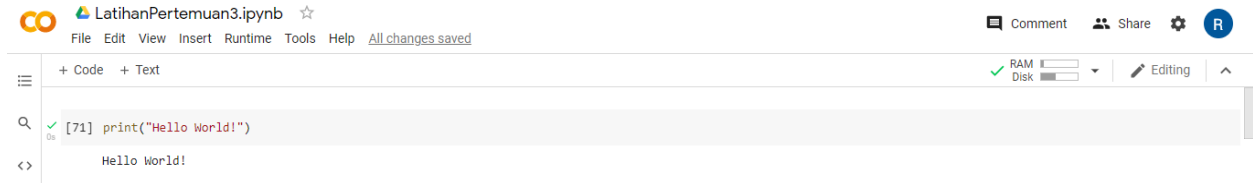
TIF K 18 CID B

**SEKOLAH TINGGI TEKNOLOGI BANDUNG
2021**

Latihan pertemuan 3

Hasil Praktikum Google Colab

print "Hello World!"



The screenshot shows the Google Colab interface for a file named 'LatihanPertemuan3.ipynb'. The top bar includes the Colab logo, file name, and a star icon. Below this is a menu bar with 'File', 'Edit', 'View', 'Insert', 'Runtime', 'Tools', and 'Help'. A status bar indicates 'All changes saved'. On the right, there are icons for 'Comment', 'Share', 'Settings', and a user profile icon. The main area shows a code cell with the following content:

```
[71] print("Hello World!")
```

The output of the cell is 'Hello World!'.

Type data Python (data masukan untuk tipe data yang sama tanpa Python List)



The screenshot shows the Google Colab interface for the same file. The code cell contains the following assignments:

```
[72] height = 1.84
[73] tall = True
[74] height1 = 1.84
[75] height2 = 1.79
[76] height3 = 1.82
[77] height4 = 1.90
```

The output of the cell shows the values assigned to each variable: 1.84, True, 1.84, 1.79, 1.82, and 1.90.

Python List [a, b, c]



The screenshot shows the Google Colab interface for the same file. The code cell contains the following assignments:

```
[78] [1.84, 1.79, 1.82, 1.90, 1.80]
[79] height = [1.84, 1.79, 1.82, 1.90, 1.80]
[80] height
[81] famz = ["Abe", 1.84, "Beb", 1.79, "Cory", 1.82, "Dad", 1.90]
[82] famz
```

The output of the cell shows the list [1.84, 1.79, 1.82, 1.9, 1.8] for the first three cells, the list [1.84, 1.79, 1.82, 1.9, 1.8] for the fourth cell, and the list ['Abe', 1.84, 'Beb', 1.79, 'Cory', 1.82, 'Dad', 1.9] for the last two cells.

Python List

 LatihanPertemuan3.ipynb ☆
File Edit View Insert Runtime Tools Help [All changes saved](#)

Comment Share Settings R

+ Code + Text

RAM Disk Editing

Python List

```
[83] height = [1.84, 1.79, 1.82, 1.90, 1.80]
[84] height
[1.84, 1.79, 1.82, 1.9, 1.8]
[85] weight = [66.5, 60.3, 64.7, 89.5, 69.8]
[86] weight
[66.5, 60.3, 64.7, 89.5, 69.8]
[87] weight / height ** 2
TypeError                                 Traceback (most recent call last)
<ipython-input-87-6a4c0c70e3b9> in <module>()
----> 1 weight / height ** 2
TypeError: unsupported operand type(s) for ** or pow(): 'list' and 'int'
```

NumPy

 LatihanPertemuan3.ipynb ☆
File Edit View Insert Runtime Tools Help [All changes saved](#)

Comment Share Settings R


+ Code + Text

RAM Disk Editing

NumPy

```
[88] pip install numpy
Requirement already satisfied: numpy in /usr/local/lib/python3.7/dist-packages (1.19.5)
[89] import numpy as np
[90] np_height = np.array(height)
[91] np_height
array([1.84, 1.79, 1.82, 1.9 , 1.8 ])
[92] np_weight = np.array(weight)
[93] np_weight
array([66.5, 60.3, 64.7, 89.5, 69.8])
[94] bmi = np_weight / np_height ** 2
[95] bmi
array([19.64201323, 18.81963734, 19.53266514, 24.79224377, 21.54320988])
```

NumPy Array berdimensi-n

 LatihanPertemuan3.ipynb ☆
File Edit View Insert Runtime Tools Help [All changes saved](#)

Comment Share Settings R

+ Code + Text

RAM Disk Editing

NumPy Array berdimensi-n

```
[96] import numpy as np
[97] np_height = np.array([1.84, 1.79, 1.82, 1.9, 1.8])
[98] np_weight = np.array([66.5, 60.3, 64.7, 89.5, 69.8])
```

```
[99] type(np_height)
      numpy.ndarray

[100] type(np_weight)
      numpy.ndarray

[101] np_2d = np.array([[1, 2, 3, 4, 5],
                     [6, 7, 8, 9, 10]])

[102] np_2d
      array([[ 1,  2,  3,  4,  5],
             [ 6,  7,  8,  9, 10]])

[x] [103] np_2d.shape
      (2, 5)
```

SciPy

LatihanPertemuan3.ipynb ☆

File Edit View Insert Runtime Tools Help [All changes saved](#)

+ Code + Text

SciPy

```
[104] pip install scipy
```

Pandas

LatihanPertemuan3.ipynb ☆

File Edit View Insert Runtime Tools Help [All changes saved](#)

+ Code + Text

Pandas

```
[105] pip install pandas

[x] [106] #series
      np.array([1, 2, 3, 4, 5])
      array([1, 2, 3, 4, 5])

[107] #data Frame
      np.array([[1, 2], [3, 4]])
      array([[1, 2],
             [3, 4]])

[109] import pandas as pd

[110] from google.colab import drive
      drive.mount('/content/drive')
      Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force_remount=True).

[111] %cd '/content/drive/MyDrive/Data Mining-Rifki Aditya Nugraha'
      /content/drive/MyDrive/Data Mining-Rifki Aditya Nugraha

[112] pwd
      '/content/drive/MyDrive/Data Mining-Rifki Aditya Nugraha'

[113] !pip install numpy
      !pip install pandas
      !pip install scipy

[114] import numpy as np
      import pandas as pd
```

0s

 $\{x\}$

0	IN	Indonesia	250	123456	Jakarta
1	MA	Malaysia	25	3456	KL
2	SI	Singapura	15	456	Singapura
3	JP	Jepang	60	5678	Tokyo
4	TH	Thailand	45	678	Bangkok

0s

```
0    250
1     25
2     15
3     60
4     45
Name: Populasi, dtype: int64
```

