

OLEH: HASBULLAH ABU BAKAR

ASAS PYTHON PROGRAMMING



OBJEKTIF KELAS

- Memperkenalkan asas Python
- Install dan configure PyCharm
- Excel Manipulation
- EDA (Exploratory Data Analysis)

The background features several thin, light purple lines that intersect to form a series of irregular, overlapping polygons. These lines are positioned primarily around the edges of the frame, creating a modern, architectural feel.

“MASA ITU EMAS”

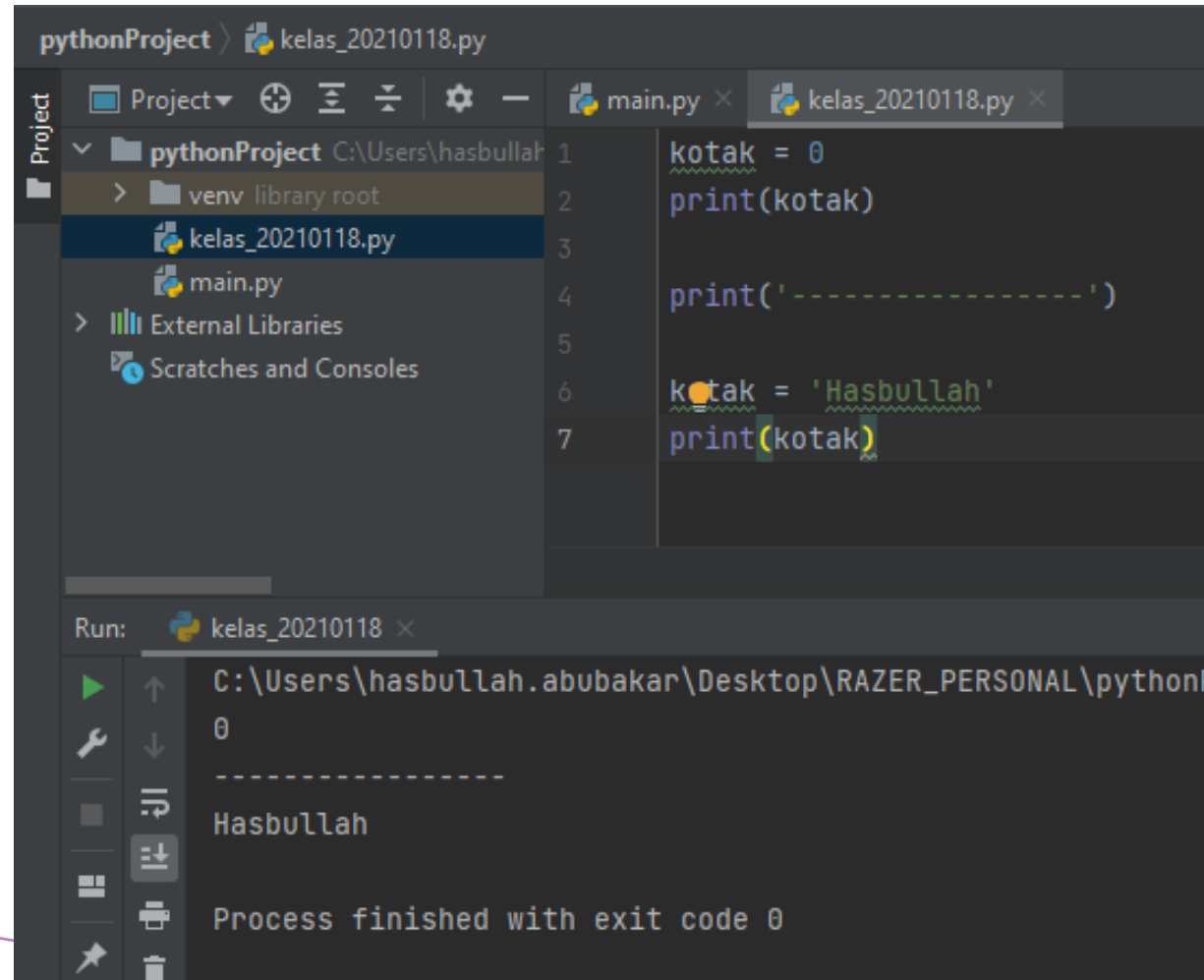
APA ITU PYTHON

- Object-oriented programming language.
- High-level language
- Salah satu “programming language” yang populer
- Digunakan untuk:
 - Membina website
 - Automasi Tugas
 - Analisis Data

BAGAIMANA PYTHON BERFUNGSI?



KONSEP PENTING: VARIABLE



The screenshot shows an IDE window for a project named 'pythonProject'. The file explorer on the left shows the project structure, including a 'venv' directory and two Python files: 'main.py' and 'kelas_20210118.py'. The 'kelas_20210118.py' file is open in the editor, showing the following code:

```
1 kotak = 0
2 print(kotak)
3
4 print('-----')
5
6 kotak = 'Hasbullah'
7 print(kotak)
```

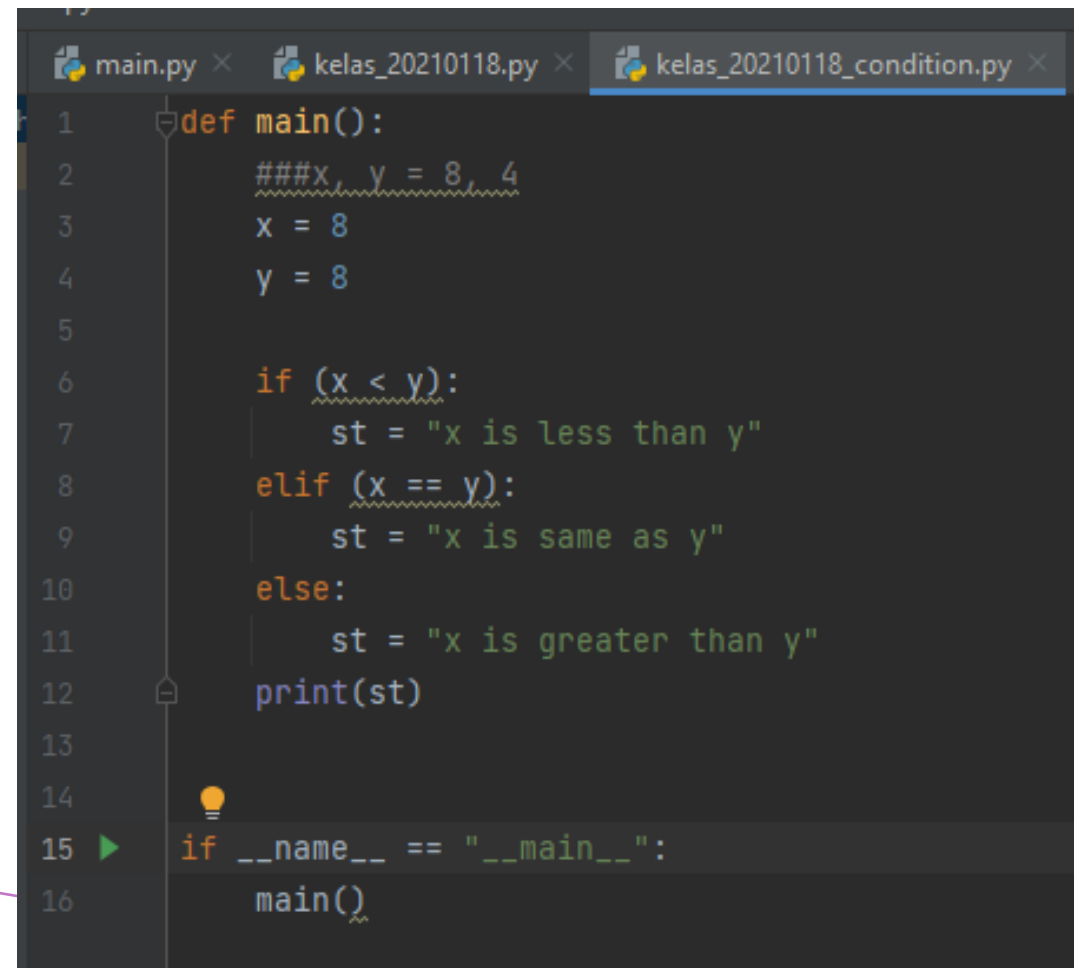
Below the editor, the 'Run' console shows the output of the program:

```
Run: python kelas_20210118
C:\Users\hasbullah.abubakar\Desktop\RAZER_PERSONAL\pythonProject
0
-----
Hasbullah
Process finished with exit code 0
```

KONSEP PENTING: CONDITIONAL

```
main.py x kelas_20210118.py x kelas_20210118_condition.py x
1  def main():
2      ###x, y = 8, 4
3      x = 8
4      y = 8
5
6      if (x < y):
7          st = "x is less than y"
8      elif (x == y):
9          st = "x is same as y"
10     else:
11         st = "x is greater than y"
12     print(st)
13
14
15  if __name__ == "__main__":
16      main()
```

KONSEP PENTING: LOOP



The image shows a screenshot of a Python IDE with three tabs: `main.py`, `kelas_20210118.py`, and `kelas_20210118_condition.py`. The active tab is `kelas_20210118_condition.py`, which contains the following Python code:

```
1  def main():
2      ###x, y = 8, 4
3      x = 8
4      y = 8
5
6      if (x < y):
7          st = "x is less than y"
8      elif (x == y):
9          st = "x is same as y"
10     else:
11         st = "x is greater than y"
12     print(st)
13
14
15  if __name__ == "__main__":
16      main()
```

The code defines a `main()` function that compares two variables, `x` and `y`. Both are set to 8. The function uses an `if-elif-else` structure to determine the relationship between `x` and `y`. Since `x` is equal to `y`, the output will be "x is same as y". The script is executed from the bottom, where `if __name__ == "__main__": main()` is present.

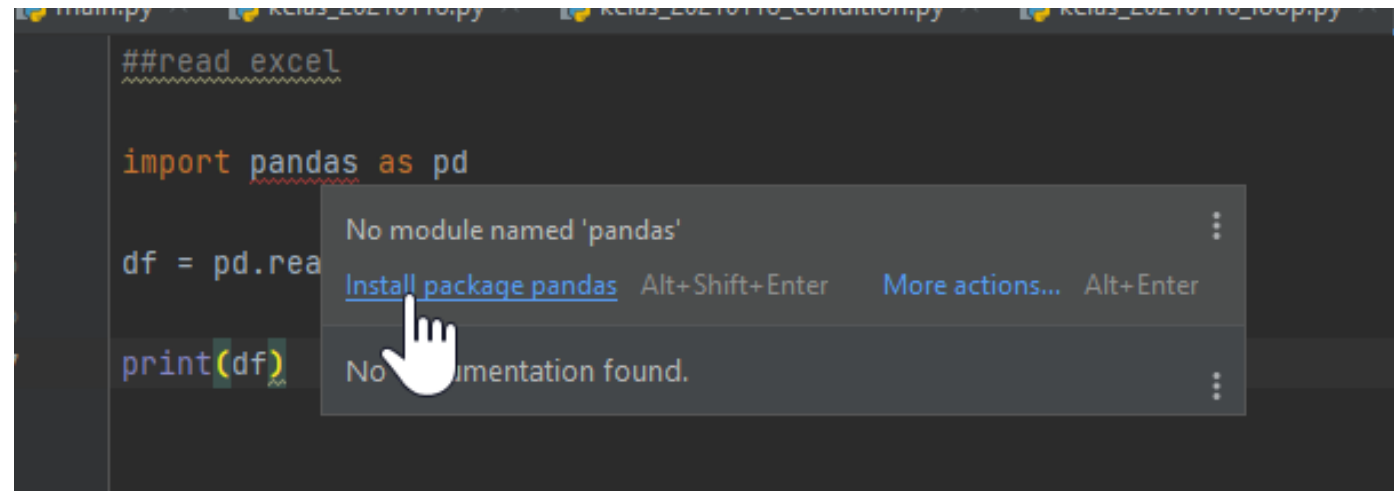
The background features several thin, intersecting purple lines that create a geometric, abstract pattern. These lines are positioned diagonally across the frame, with some crossing near the top right and others extending towards the bottom left.

DEMO 3

MANIPULASI EXCEL

- pip install xlrd

```
PS C:\Users\hasbullah.abubakar\Desktop\pythonProject> pip install xlrd
Collecting xlrd
  Using cached xlrd-2.0.1-py2.py3-none-any.whl (96 kB)
Installing collected packages: xlrd
Successfully installed xlrd-2.0.1
```



```
PS C:\Users\hasbullah.abubakar\Desktop\RAZER_PERSONAL\pythonProject> pip install openpyxl
Collecting openpyxl
  Downloading openpyxl-3.0.9-py2.py3-none-any.whl (242 kB)
    |████████████████████████████████████████| 242 kB 1.1 MB/s
Collecting et_xmlfile
  Downloading et_xmlfile-1.1.0-py3-none-any.whl (4.7 kB)
Installing collected packages: et_xmlfile, openpyxl
Successfully installed et_xmlfile-1.1.0 openpyxl-3.0.9
```

EDA – EXPLORATORY DATA ANALYSIS

- <https://www.kaggle.com/ekami66/detailed-exploratory-data-analysis-with-python>

CONTACT

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The background features several thin, purple lines that intersect to form a series of irregular, overlapping geometric shapes, creating a modern and abstract design.

TERIMA KASIH