

PYTHON #3 (ARTIFICIAL INTELLIGENCE)

ANGGA DWI WIBOWO

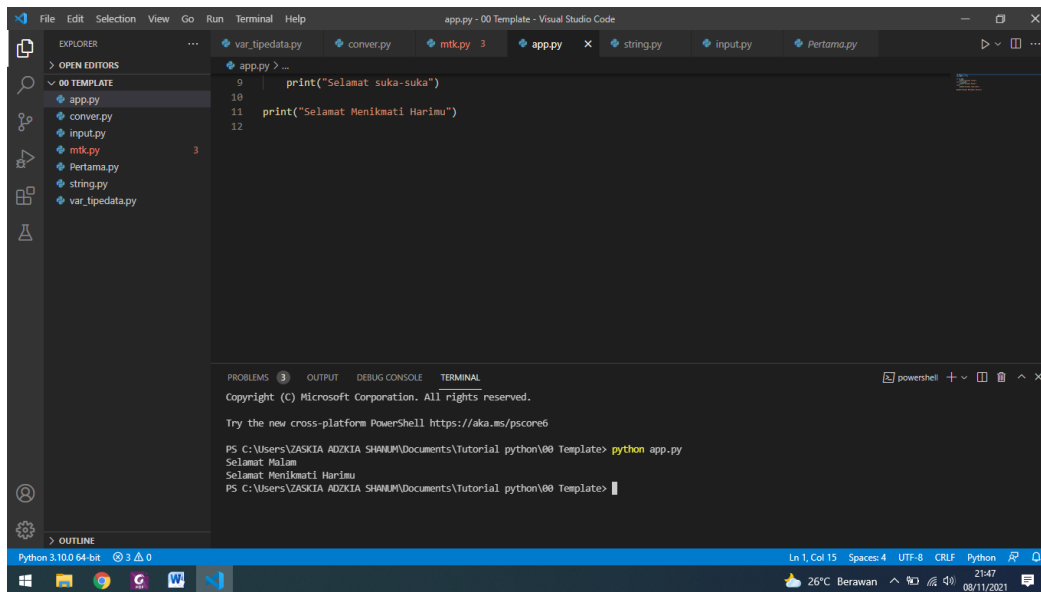
NIM. 211001123

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1. Percabangan IF



```
File Edit Selection View Go Run Terminal Help
app.py - 00 Template - Visual Studio Code

EXPLORER
> OPEN EDITORS
00 TEMPLATE
  app.py
  conver.py
  input.py
  mtk.py
  Pertama.py
  string.py
  var_tipedatapy

app.py > ...
9   print("Selamat suka-suka")
10
11  print("Selamat Menikmati Harimu")
12

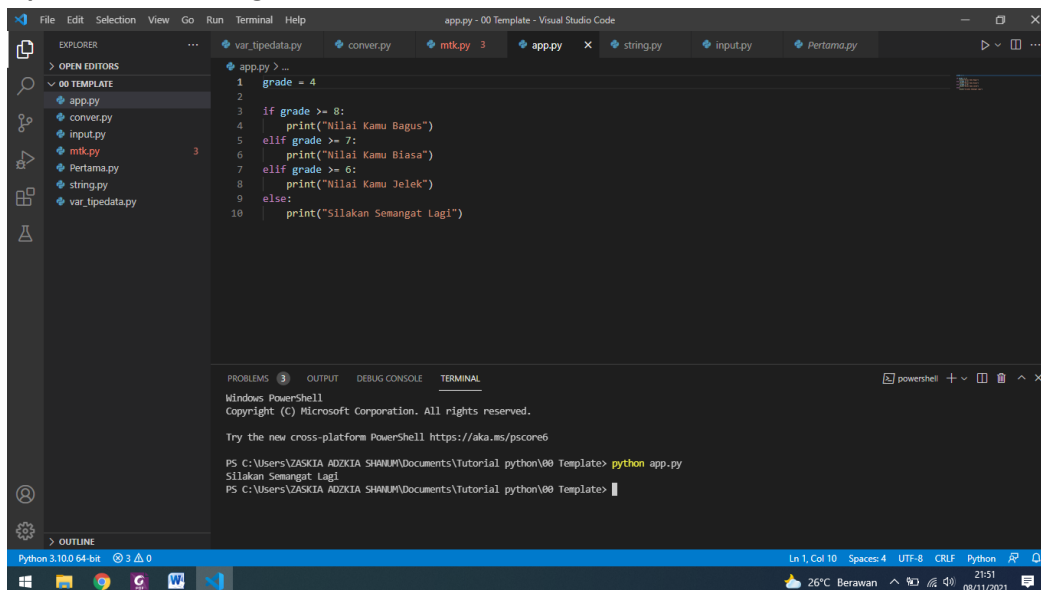
PROBLEMS 0 OUTPUT DEBUG CONSOLE TERMINAL
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\ZASKIA ADZKIA SHANUM\Documents\Tutorial python\00 Template> python app.py
Selamat Malam
Selamat Menikmati Harimu
PS C:\Users\ZASKIA ADZKIA SHANUM\Documents\Tutorial python\00 Template>

Python 3.10.0 64-bit 3 0 Ln 1, Col 15 Spaces: 4 UTF-8 CRLF Python 21:47 08/11/2021
```

2. Operator Perbandingan



```
File Edit Selection View Go Run Terminal Help
app.py - 00 Template - Visual Studio Code

EXPLORER
> OPEN EDITORS
00 TEMPLATE
  app.py
  conver.py
  input.py
  mtk.py
  Pertama.py
  string.py
  var_tipedatapy

app.py > ...
1  grade = 4
2
3  if grade >= 8:
4      print("Nilai Kamu Bagus")
5  elif grade >= 7:
6      print("Nilai Kamu Biasa")
7  elif grade >= 6:
8      print("Nilai Kamu Jelek")
9  else:
10     print("Silakan Semangat Lagi")

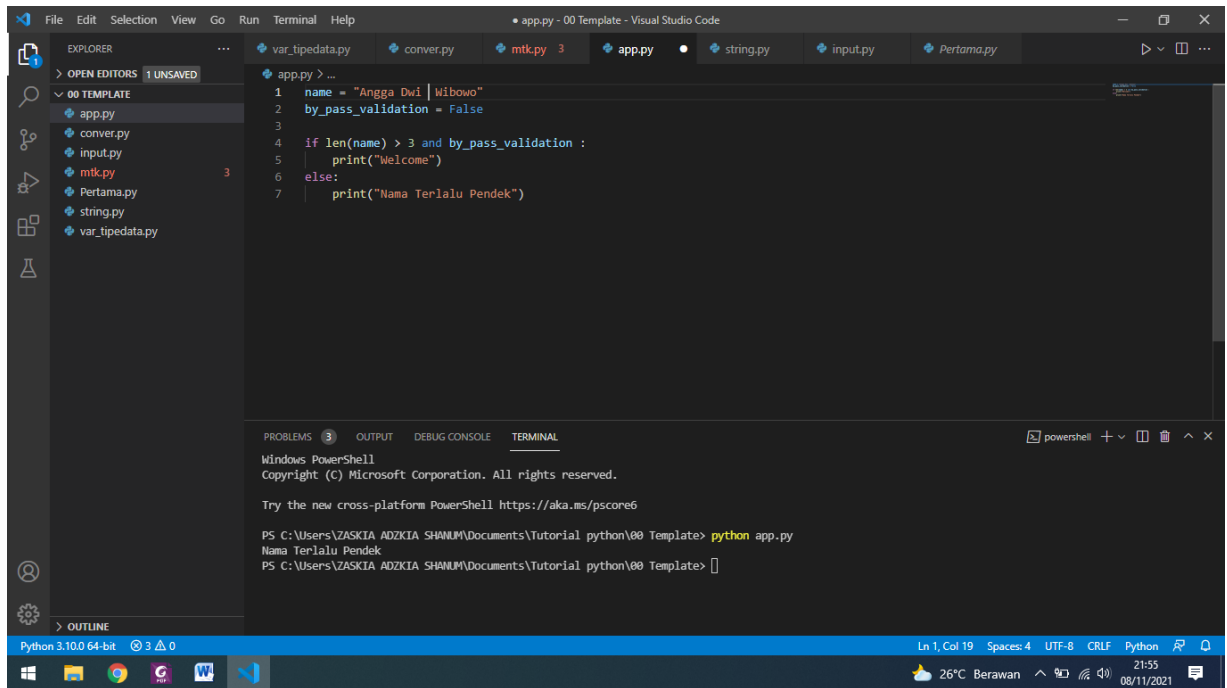
PROBLEMS 0 OUTPUT DEBUG CONSOLE TERMINAL
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\ZASKIA ADZKIA SHANUM\Documents\Tutorial python\00 Template> python app.py
Silakan Semangat Lagi
PS C:\Users\ZASKIA ADZKIA SHANUM\Documents\Tutorial python\00 Template>

Python 3.10.0 64-bit 3 0 Ln 1, Col 10 Spaces: 4 UTF-8 CRLF Python 21:51 08/11/2021
```

3. Operator Logika



The screenshot shows the Visual Studio Code interface with a Python file named `app.py` open. The code defines a variable `name` as "Angga Dwi Wibowo" and `by_pass_validation` as `False`. It uses an `if` statement with a logical `and` operator to check if the length of `name` is greater than 3 and `by_pass_validation` is `False`. If true, it prints "Welcome"; otherwise, it prints "Nama Terlalu Pendek". The terminal shows the command `python app.py` being executed, resulting in the output "Nama Terlalu Pendek".

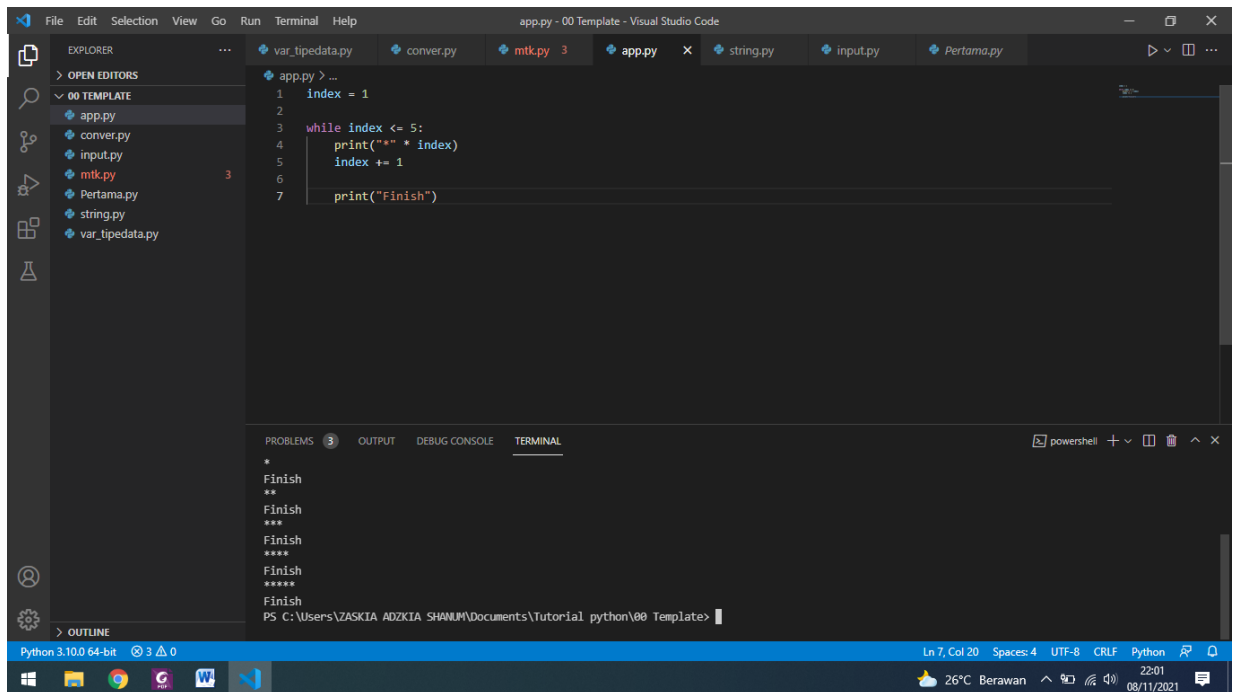
```
1 name = "Angga Dwi Wibowo"
2 by_pass_validation = False
3
4 if len(name) > 3 and by_pass_validation :
5     print("Welcome")
6 else:
7     print("Nama Terlalu Pendek")
```

Windows PowerShell
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Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS C:\Users\ZASKIA ADZKIA SHAMUM\Documents\Tutorial python\00 Template> python app.py
Nama Terlalu Pendek
PS C:\Users\ZASKIA ADZKIA SHAMUM\Documents\Tutorial python\00 Template>

4. Perulangan While



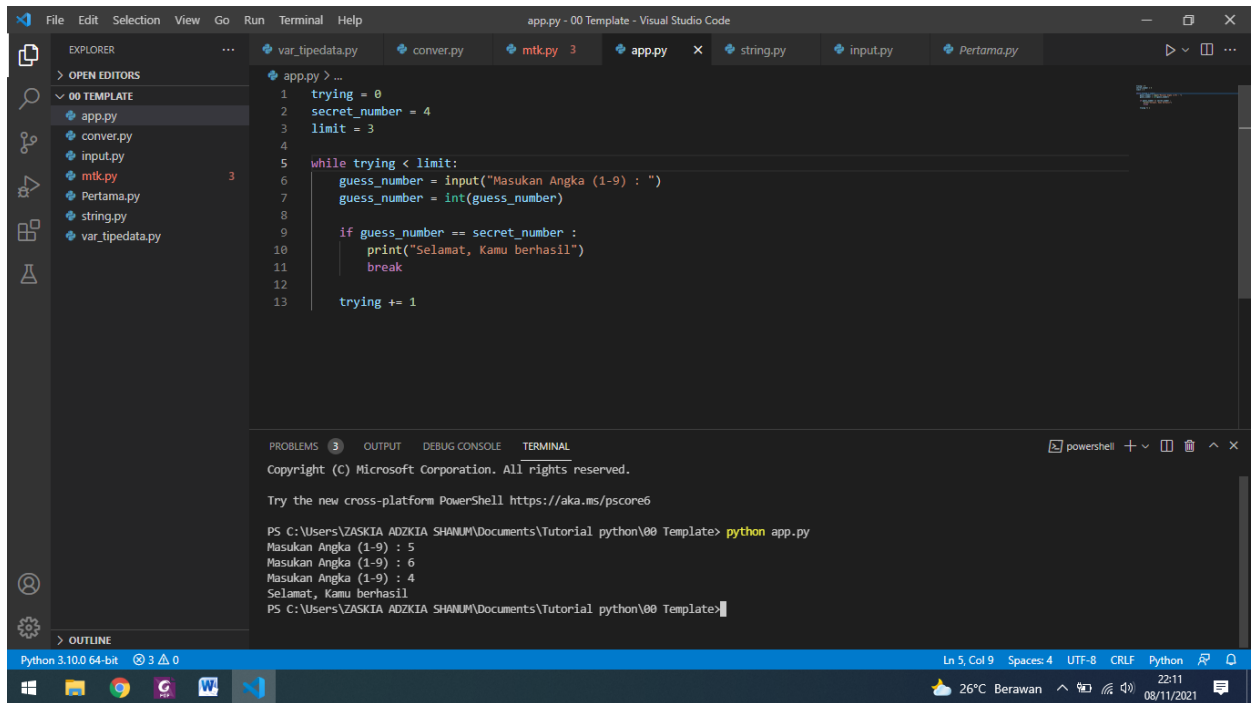
The screenshot shows the Visual Studio Code interface with a Python file named `app.py` open. The code initializes `index` to 1 and enters a `while` loop that runs as long as `index` is less than or equal to 5. Inside the loop, it prints a series of asterisks corresponding to the current `index` value and increments `index` by 1. After the loop, it prints "Finish". The terminal shows the output of the program: five lines of asterisks followed by "Finish".

```
1 index = 1
2
3 while index <= 5:
4     print("*" * index)
5     index += 1
6
7 print("Finish")
```

*
**

Finish
PS C:\Users\ZASKIA ADZKIA SHAMUM\Documents\Tutorial python\00 Template>

5. Game Tebak Angka



The screenshot shows the Visual Studio Code interface with a Python script named `app.py` open in the editor. The script implements a number guessing game. The Explorer sidebar on the left shows the project structure with files: `app.py`, `conver.py`, `input.py`, `mtk.py`, `Pertama.py`, `string.py`, and `var_tipedata.py`. The `mtk.py` file is selected and has 3 lines of code. The `app.py` file contains the following code:

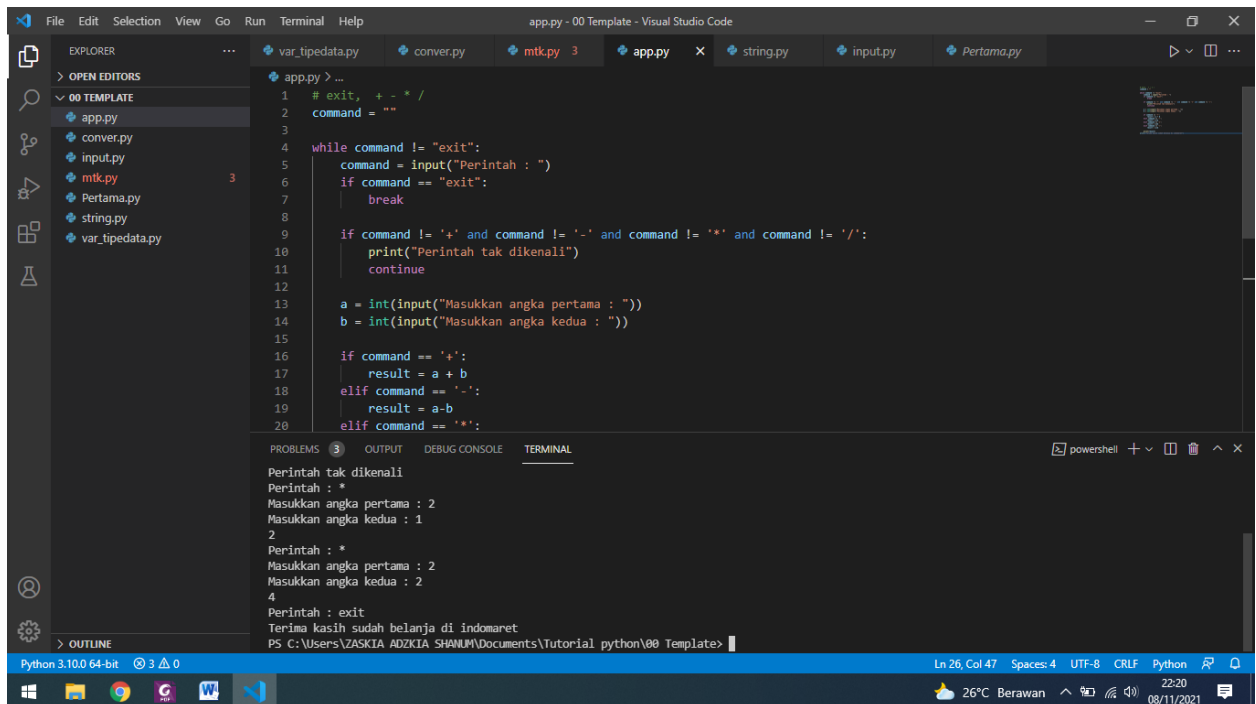
```
1  trying = 0
2  secret_number = 4
3  limit = 3
4
5  while trying < limit:
6      guess_number = input("Masukan Angka (1-9) : ")
7      guess_number = int(guess_number)
8
9      if guess_number == secret_number :
10         print("Selamat, Kamu berhasil")
11         break
12
13     trying += 1
```

The Terminal at the bottom shows the execution of the script:

```
PS C:\Users\ZASKIA ADZKIA SHANUM\Documents\Tutorial python\00 Template> python app.py
Masukan Angka (1-9) : 5
Masukan Angka (1-9) : 6
Masukan Angka (1-9) : 4
Selamat, Kamu berhasil
PS C:\Users\ZASKIA ADZKIA SHANUM\Documents\Tutorial python\00 Template>
```

The status bar at the bottom indicates Python 3.10.0 64-bit, Ln 5, Col 9, Spaces 4, UTF-8, CRLF, Python, and the date 08/11/2021.

6. Aplikasi Kalkulator



The screenshot shows the Visual Studio Code interface with a Python script named `app.py` open in the editor. The script implements a simple calculator. The Explorer sidebar on the left shows the project structure with files: `app.py`, `conver.py`, `input.py`, `mtk.py`, `Pertama.py`, `string.py`, and `var_tipedata.py`. The `mtk.py` file is selected and has 3 lines of code. The `app.py` file contains the following code:

```
1  # exit, + - * /
2  command = ""
3
4  while command != "exit":
5      command = input("Perintah : ")
6      if command == "exit":
7          break
8
9      if command != '+' and command != '-' and command != '*' and command != '/':
10         print("Perintah tak dikenali")
11         continue
12
13     a = int(input("Masukkan angka pertama : "))
14     b = int(input("Masukkan angka kedua : "))
15
16     if command == '+':
17         result = a + b
18     elif command == '-':
19         result = a - b
20     elif command == '*':
```

The Terminal at the bottom shows the execution of the script:

```
Perintah tak dikenali
Perintah : *
Masukkan angka pertama : 2
Masukkan angka kedua : 1
2
Perintah : *
Masukkan angka pertama : 2
Masukkan angka kedua : 2
4
Perintah : exit
Terima kasih sudah belanja di indomaret
PS C:\Users\ZASKIA ADZKIA SHANUM\Documents\Tutorial python\00 Template>
```

The status bar at the bottom indicates Python 3.10.0 64-bit, Ln 26, Col 47, Spaces 4, UTF-8, CRLF, Python, and the date 08/11/2021.