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Python 3

1. Percabangan If

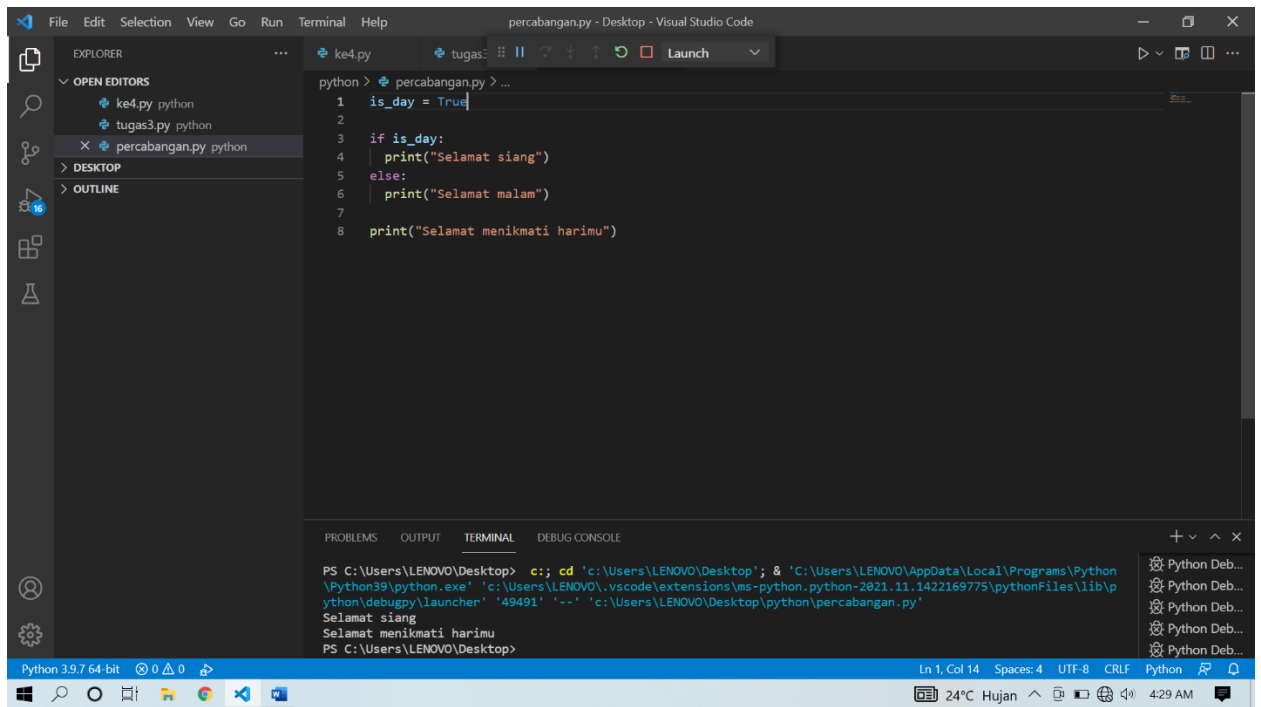
The image displays two screenshots of the Visual Studio Code editor, showing the development and execution of a Python script named `percabangan.py`.

Top Screenshot: The code defines a variable `is_day = True` and uses an `if` statement to print "Selamat siang" and "Selamat menikmati". The terminal output shows the successful execution of the script, printing the expected messages.

```
python > percabangan.py > ...
1 is_day = True
2
3 if is_day:
4     print("Selamat siang")
5     print("Selamat menikmati")
6
```

Bottom Screenshot: The code is modified to include an `else` clause, printing "Selamat malam" and "Selamat menikmati harimu" when `is_day` is `False`. The terminal output shows the execution of the modified script, printing the messages for the `else` branch.

```
python > percabangan.py > ...
1 is_day = False
2
3 if is_day:
4     print("Selamat siang")
5 else:
6     print("Selamat malam")
7     print("Selamat menikmati harimu")
8
```



File Edit Selection View Go Run Terminal Help percabangan.py - Desktop - Visual Studio Code

EXPLORER

OPEN EDITORS

- ke4.py python
- tugas3.py python
- X percabangan.py python

DESKTOP

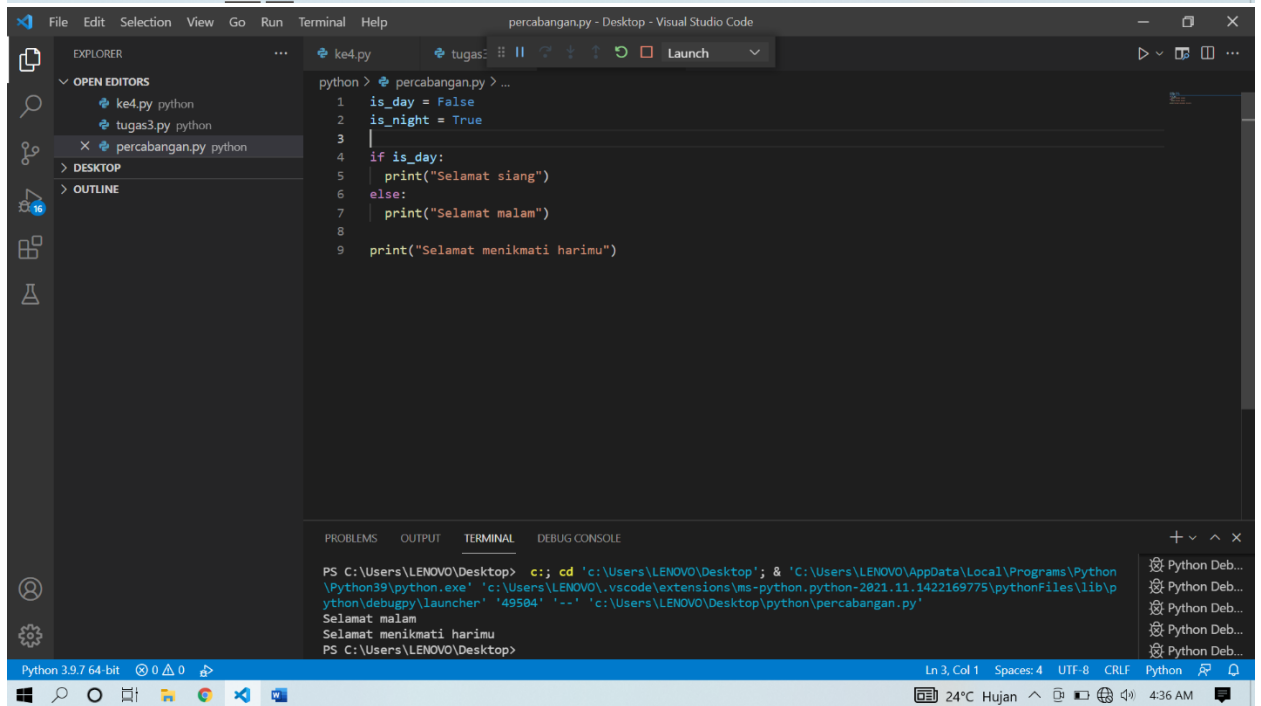
OUTLINE

```
python > percabangan.py > ...
1 is_day = True
2
3 if is_day:
4     print("Selamat siang")
5 else:
6     print("Selamat malam")
7
8 print("Selamat menikmati harimu")
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
PS C:\Users\LENOVO\Desktop> c:: cd 'c:\Users\LENOVO\Desktop'; & 'C:\Users\LENOVO\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\LENOVO\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '49491' '--' 'c:\Users\LENOVO\Desktop\python\percabangan.py'
Selamat siang
Selamat menikmati harimu
PS C:\Users\LENOVO\Desktop>
```

Python 3.9.7 64-bit 0 0 0 Python Ln 1, Col 14 Spaces: 4 UTF-8 CRLF 4:29 AM



File Edit Selection View Go Run Terminal Help percabangan.py - Desktop - Visual Studio Code

EXPLORER

OPEN EDITORS

- ke4.py python
- tugas3.py python
- X percabangan.py python

DESKTOP

OUTLINE

```
python > percabangan.py > ...
1 is_day = False
2 is_night = True
3
4 if is_day:
5     print("Selamat siang")
6 else:
7     print("Selamat malam")
8
9 print("Selamat menikmati harimu")
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
PS C:\Users\LENOVO\Desktop> c:: cd 'c:\Users\LENOVO\Desktop'; & 'C:\Users\LENOVO\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\LENOVO\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '49504' '--' 'c:\Users\LENOVO\Desktop\python\percabangan.py'
Selamat malam
Selamat menikmati harimu
PS C:\Users\LENOVO\Desktop>
```

Python 3.9.7 64-bit 0 0 0 Python Ln 3, Col 1 Spaces: 4 UTF-8 CRLF 4:36 AM

2. Operator perbandingan

The image displays two screenshots of the Visual Studio Code editor interface, showing Python code and terminal output.

Top Screenshot: The editor shows a file named `operator.py` with the following Python code:

```
python > operator.py > ...
1 result = 8 < 7
2 print(result)
3
4 result = 8 > 7
5 print(result)
6
7 result = 8 == 7
8 print(result)
9
10 result = 8 != 8
11 print(result)
```

The terminal output shows the results of these comparisons:

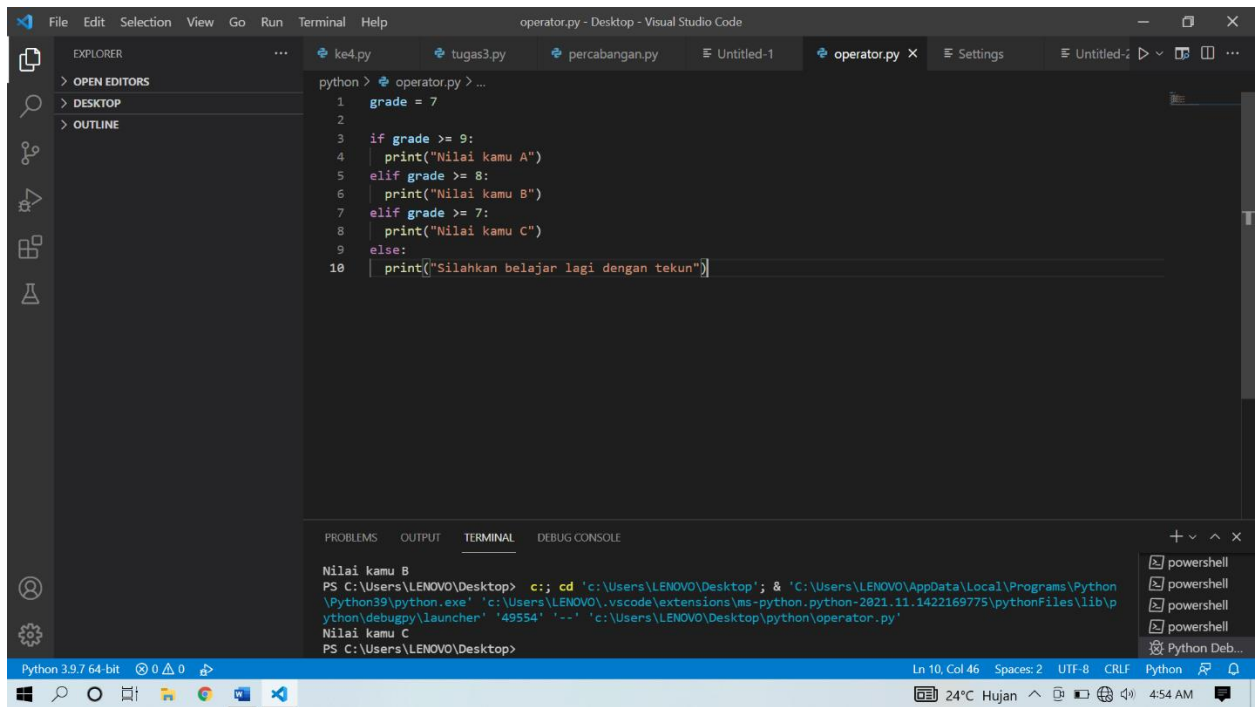
```
python\debugpy\launcher '49521' '--' 'c:\Users\LENOVO\Desktop\python\operator.py'
False
True
False
False
PS C:\Users\LENOVO\Desktop>
```

Bottom Screenshot: The editor shows a file named `operator.py` with the following Python code:

```
python > operator.py > ...
1 grade = 10
2
3 if grade >= 9:
4     print("Nilai kamu A")
5 elif grade >= 8:
6     print("Nilai kamu B")
7 elif grade >= 7:
8     print("Nilai kamu C")
9 else:
10    print("Silahkan belajar lagi dengan tekun")
```

The terminal output shows a `SyntaxError: invalid syntax` at line 10, column 17, followed by the command prompt:

```
SyntaxError: invalid syntax
PS C:\Users\LENOVO\Desktop> c:: cd 'c:\Users\LENOVO\Desktop'; & 'C:\Users\LENOVO\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\LENOVO\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\p
ython\debugpy\launcher' '49541' '--' 'c:\Users\LENOVO\Desktop\python\operator.py'
Nilai kamu A
PS C:\Users\LENOVO\Desktop>
```



operator.py - Desktop - Visual Studio Code

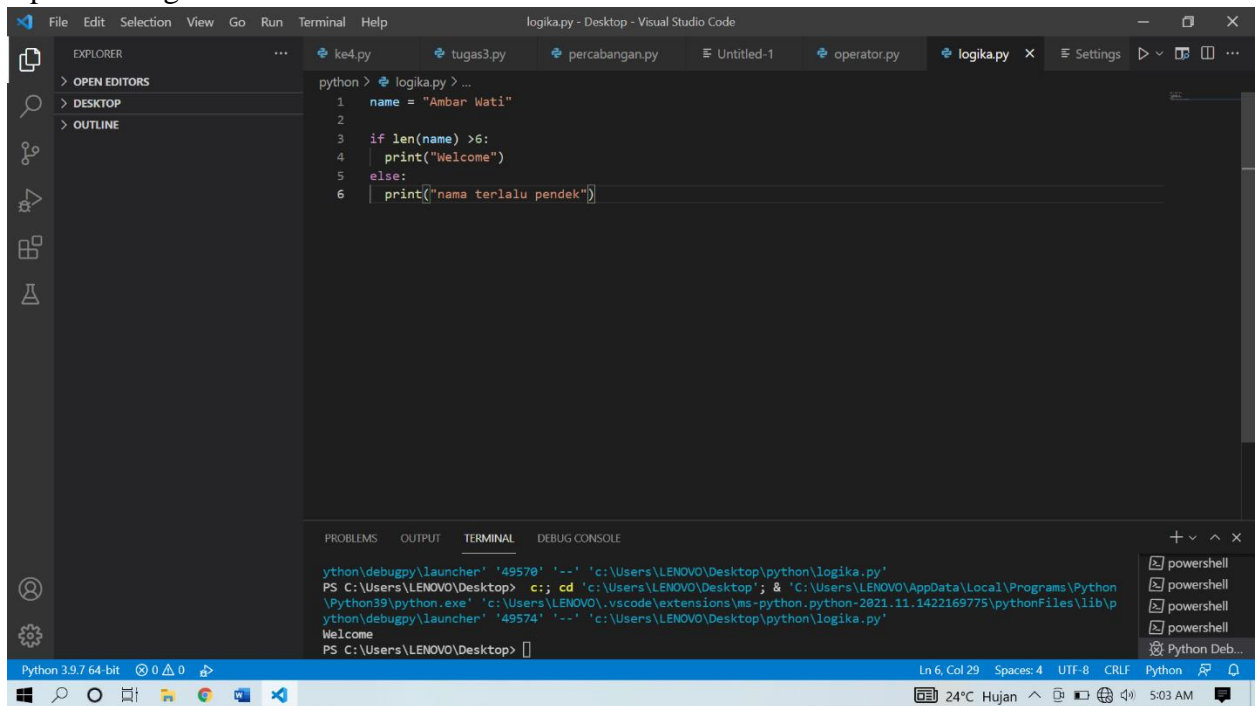
```
python > operator.py > ...
1 grade = 7
2
3 if grade >= 9:
4     print("Nilai kamu A")
5 elif grade >= 8:
6     print("Nilai kamu B")
7 elif grade >= 7:
8     print("Nilai kamu C")
9 else:
10    print("Silahkan belajar lagi dengan tekun")
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
Nilai kamu B
PS C:\Users\LENOVO\Desktop> c:: cd 'c:\Users\LENOVO\Desktop'; & 'C:\Users\LENOVO\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\LENOVO\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '49554' '--' 'c:\Users\LENOVO\Desktop\python\operator.py'
Nilai kamu C
PS C:\Users\LENOVO\Desktop>
```

Python 3.9.7 64-bit 0 0 0 Python Ln 10, Col 46 Spaces: 2 UTF-8 CRLF 24°C Hujan 4:54 AM

3. Operator Logika



logika.py - Desktop - Visual Studio Code

```
python > logika.py > ...
1 name = "Ambar Wati"
2
3 if len(name) > 6:
4     print("Welcome")
5 else:
6     print("nama terlalu pendek")
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
ython\debugpy\launcher' '49570' '--' 'c:\Users\LENOVO\Desktop\python\logika.py'
PS C:\Users\LENOVO\Desktop> c:: cd 'c:\Users\LENOVO\Desktop'; & 'C:\Users\LENOVO\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\LENOVO\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '49574' '--' 'c:\Users\LENOVO\Desktop\python\logika.py'
Welcome
PS C:\Users\LENOVO\Desktop>
```

Python 3.9.7 64-bit 0 0 0 Python Ln 6, Col 29 Spaces: 4 UTF-8 CRLF 24°C Hujan 5:03 AM

```
python > logika.py > ...
1 name = "Ambar"
2
3 if len(name) > 6:
4     print("Welcome")
5 else:
6     print("nama terlalu pendek")
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

Welcome
PS C:\Users\LENOVO\Desktop> c:: cd 'c:\Users\LENOVO\Desktop'; & 'C:\Users\LENOVO\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\LENOVO\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '49579' '-.' 'c:\Users\LENOVO\Desktop\python\logika.py'
nama terlalu pendek
PS C:\Users\LENOVO\Desktop>

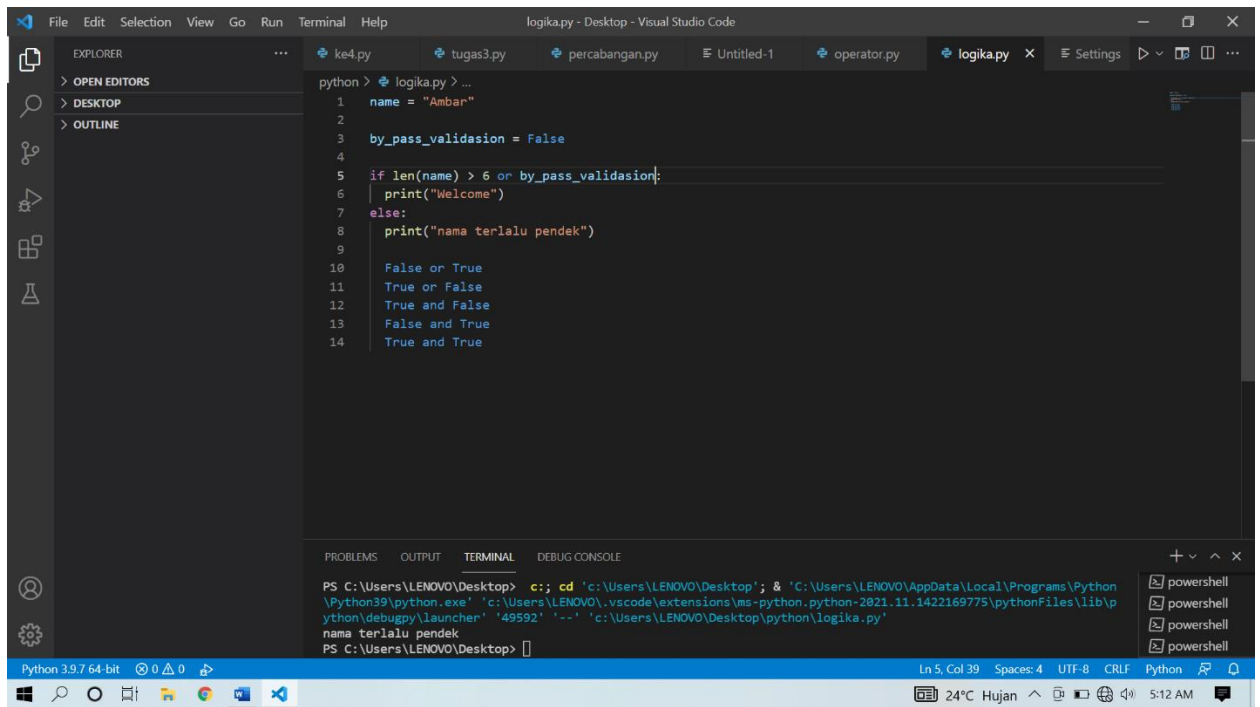
Python 3.9.7 64-bit 0 0 0 Python Ln 6, Col 31 Spaces: 4 UTF-8 CRLF Python Deb...

```
python > logika.py > ...
1 name = "Ambar"
2
3 if len(name) > 6 or True :
4     print("Welcome")
5 else:
6     print("nama terlalu pendek")
7
8 False or True
9 True or False
10 True and False
11 False and True
12 True and True
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

PS C:\Users\LENOVO\Desktop> c:: cd 'c:\Users\LENOVO\Desktop'; & 'C:\Users\LENOVO\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\LENOVO\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '49587' '-.' 'c:\Users\LENOVO\Desktop\python\logika.py'
Welcome
PS C:\Users\LENOVO\Desktop>

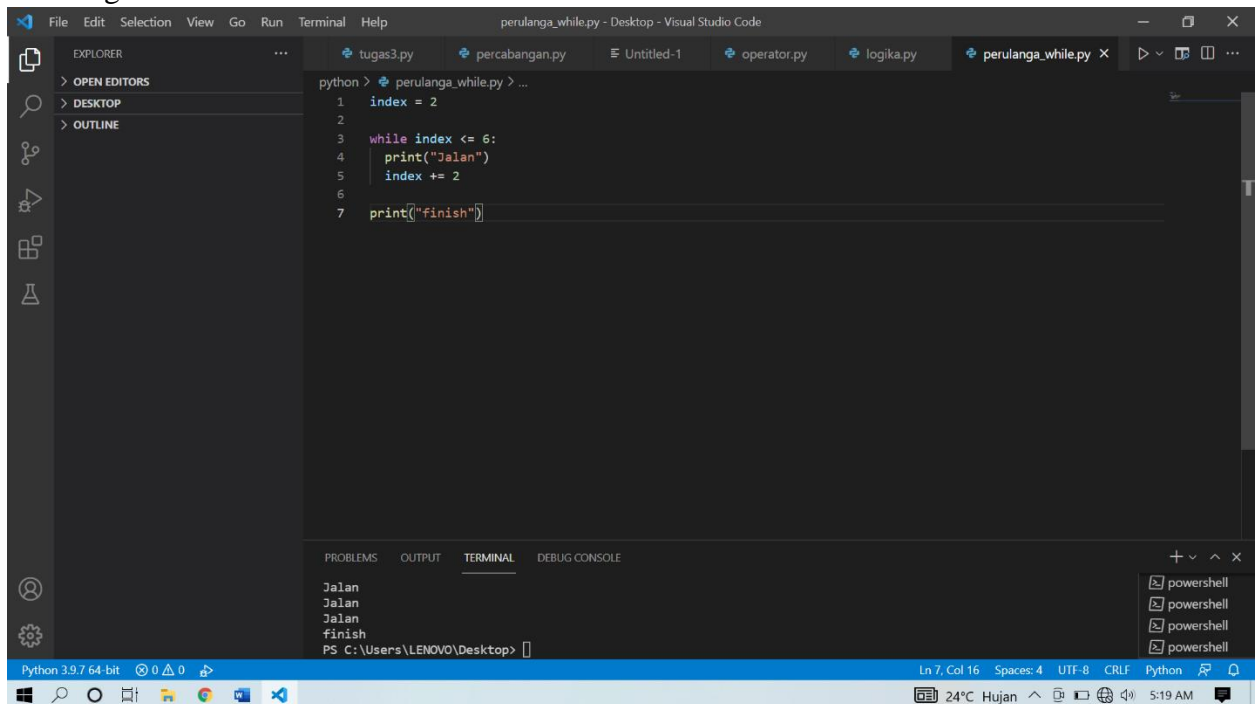
Python 3.9.7 64-bit 0 0 0 Python Ln 3, Col 25 Spaces: 4 UTF-8 CRLF Python Deb...



```
python > logika.py > ...
1 name = "Ambar"
2
3 by_pass_validasion = False
4
5 if len(name) > 6 or by_pass_validasion:
6     print("Welcome")
7 else:
8     print("nama terlalu pendek")
9
10 False or True
11 True or False
12 True and False
13 False and True
14 True and True
```

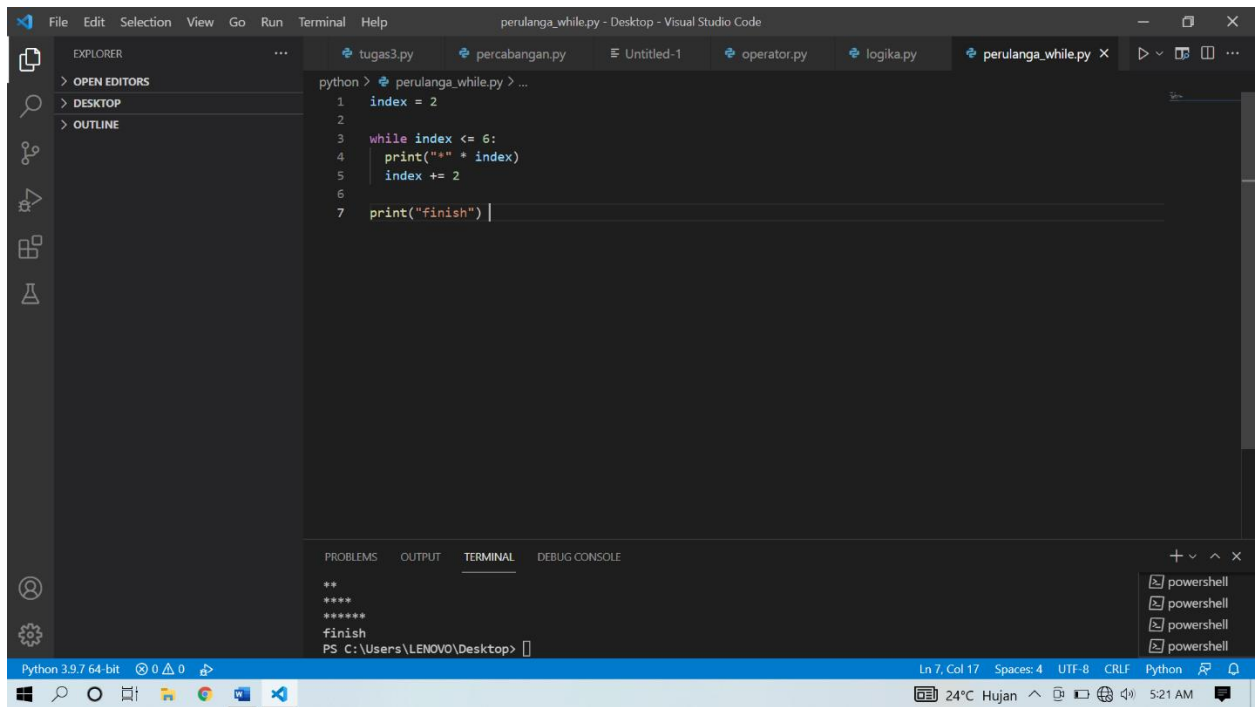
```
PS C:\Users\LENOVO\Desktop> c:: cd 'c:\Users\LENOVO\Desktop'; & 'C:\Users\LENOVO\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\LENOVO\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '49592' '--' 'c:\Users\LENOVO\Desktop\python\logika.py'
nama terlalu pendek
PS C:\Users\LENOVO\Desktop>
```

4. Perulangan While



```
python > perulangan_while.py > ...
1 index = 2
2
3 while index <= 6:
4     print("Jalan")
5     index += 2
6
7 print("finish")
```

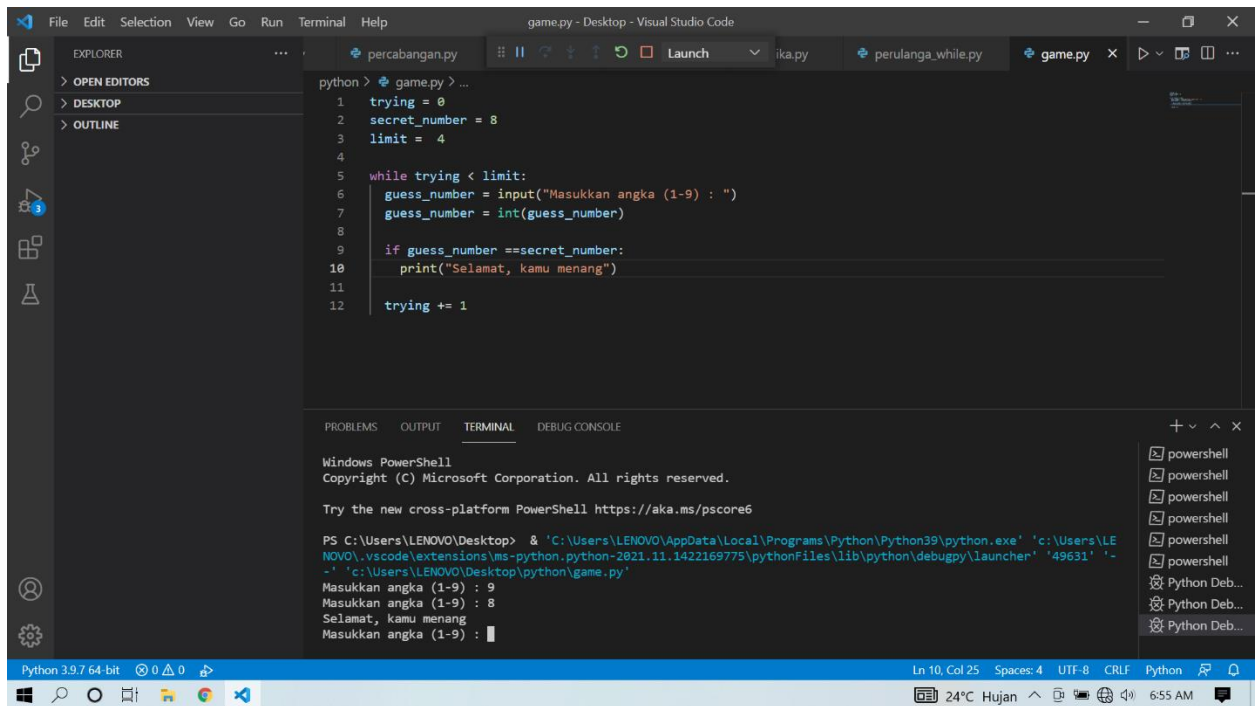
```
Jalan
Jalan
Jalan
Jalan
Jalan
finish
PS C:\Users\LENOVO\Desktop>
```



```
python > perulanga_while.py > ...
1 index = 2
2
3 while index <= 6:
4     print("**** * index)
5     index += 2
6
7 print("finish")
```

```
python > perulanga_while.py > ...
****
*****
finish
PS C:\Users\LENOVO\Desktop>
```

5. Game Tebak Gambar



```
python > game.py > ...
1 trying = 0
2 secret_number = 8
3 limit = 4
4
5 while trying < limit:
6     guess_number = input("Masukkan angka (1-9) : ")
7     guess_number = int(guess_number)
8
9     if guess_number == secret_number:
10        print("Selamat, kamu menang")
11
12    trying += 1
```

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

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

PS C:\Users\LENOVO\Desktop> & 'C:\Users\LENOVO\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\LENOVO\
NOVO\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '49631' '-
-' 'c:\Users\LENOVO\Desktop\python\game.py'
Masukkan angka (1-9) : 9
Masukkan angka (1-9) : 8
Selamat, kamu menang
Masukkan angka (1-9) :
```


The screenshot shows the Visual Studio Code interface with a Python file named `game.py` open. The code is a simple number-guessing game. The terminal window at the bottom shows the command prompt running the script, which prompts the user to enter a number between 1 and 9. The user enters 8, and the program outputs "Selamat, kamu menang" (Congratulations, you won).

```
python > game.py > ...
1  trying = 0
2  secret_number = 8
3  limit = 4
4
5  while trying < limit:
6      guess_number = input("Masukkan angka (1-9) : ")
7      guess_number = int(guess_number)
8
9      if guess_number == secret_number:
10         print("Selamat, kamu menang")
11         break
12
13     trying += 1
```

Terminal output:

```
PS C:\Users\LENOVO\Desktop> & 'C:\Users\LENOVO\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\LENOVO\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '49635' '-
-' 'c:\Users\LENOVO\Desktop\python\game.py'
Masukkan angka (1-9) : 8
Selamat, kamu menang
PS C:\Users\LENOVO\Desktop>
```

6. Aplikasi Kalkulator

The screenshot shows the Visual Studio Code interface with a Python file named `tugas3.py` open. The code is a simple calculator application. The terminal window at the bottom shows the command prompt running the script, which prompts the user to enter two numbers and an operation. The user enters 4 and 0, and the program outputs "Hasil : 4.0".

```
python > tugas3.py > ...
1  # (+ - * / exit)
2  command = ""
3
4  while command != "exit":
5      command = input("perintah : ")
6
7      if command == "exit":
8          break
9
10     if command != "+" and command != "-" and command != "*" and command != "/":
11         print("perintah tidak dikenali")
12         continue
13
14     a = int(input("Angka pertama : "))
15     b = int(input("Angka kedua : "))
16
17     if command == "+":
18         result = a + b
19     elif command == "-":
20         result = a - b
21     elif command == "*":
22         result = a * b
23     elif command == "/":
24         result = a / b
25
26     print(f"Hasil : {result}")
```

Terminal output:

```
Hasil : 4.0
perintah :
```