

Nama : Andini Wulandari

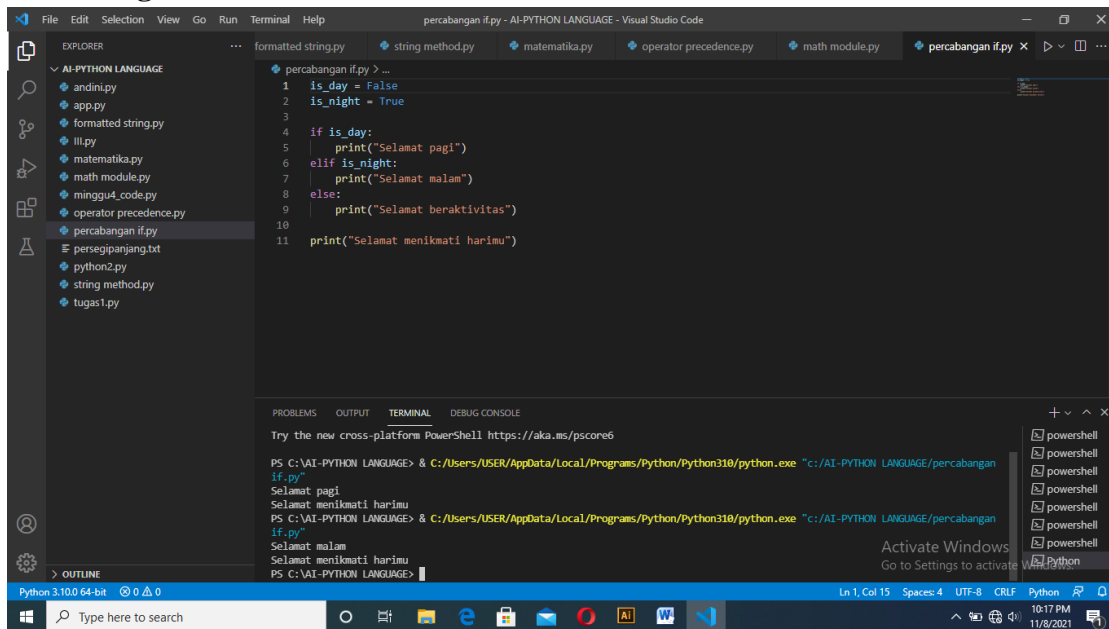
NIM : 20.01.013.020

Kelas : Teknik Informatika B

MK : Kecerdasan Buatan

## TUGAS :

### 1. Percabangan If



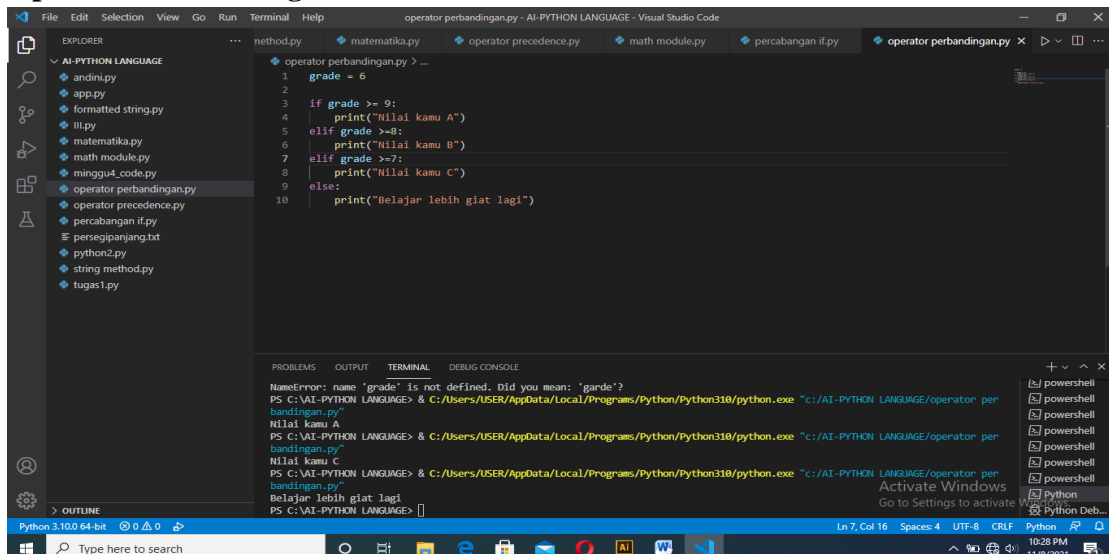
The screenshot shows the Visual Studio Code interface with a file explorer on the left containing a project named 'AI-PYTHON LANGUAGE'. The main editor displays a file named 'percabangan if.py' with the following Python code:

```
1 is_day = False
2 is_night = True
3
4 if is_day:
5     print("Selamat pagi")
6 elif is_night:
7     print("Selamat malam")
8 else:
9     print("Selamat beraktivitas")
10
11 print("Selamat menikmati harimu")
```

The terminal at the bottom shows the execution of the script using Python 3.10.0.64-bit. The output is:

```
PS C:\AI-PYTHON LANGUAGE> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe "c:/AI-PYTHON LANGUAGE/percabangan if.py"
Selamat pagi
Selamat menikmati harimu
PS C:\AI-PYTHON LANGUAGE> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe "c:/AI-PYTHON LANGUAGE/percabangan if.py"
Selamat malam
Selamat menikmati harimu
PS C:\AI-PYTHON LANGUAGE>
```

### 2. Operator Perbandingan



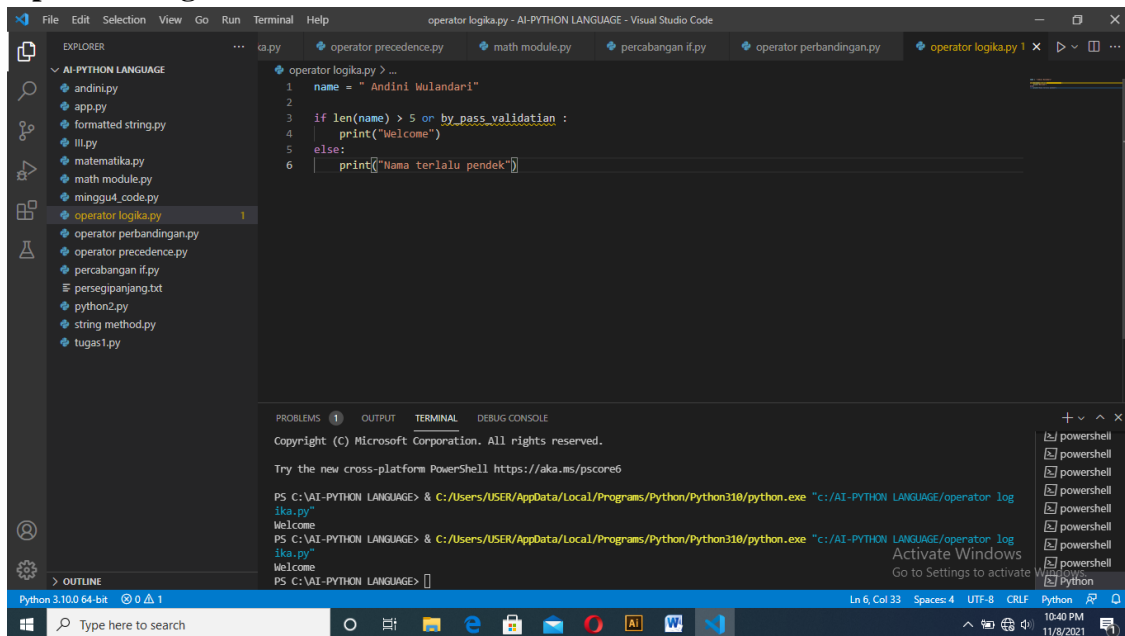
The screenshot shows the Visual Studio Code interface with a file explorer on the left containing a project named 'AI-PYTHON LANGUAGE'. The main editor displays a file named 'operator perbandingan.py' with the following Python code:

```
1 grade = 6
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("Belajar lebih giat lagi")
```

The terminal at the bottom shows the execution of the script using Python 3.10.0.64-bit. The output is:

```
PS C:\AI-PYTHON LANGUAGE> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe "c:/AI-PYTHON LANGUAGE/operator perbandingan.py"
Nilai kamu A
PS C:\AI-PYTHON LANGUAGE> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe "c:/AI-PYTHON LANGUAGE/operator perbandingan.py"
Nilai kamu B
PS C:\AI-PYTHON LANGUAGE> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe "c:/AI-PYTHON LANGUAGE/operator perbandingan.py"
Nilai kamu C
PS C:\AI-PYTHON LANGUAGE> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe "c:/AI-PYTHON LANGUAGE/operator perbandingan.py"
Belajar lebih giat lagi
PS C:\AI-PYTHON LANGUAGE>
```

### 3. Operator Logika



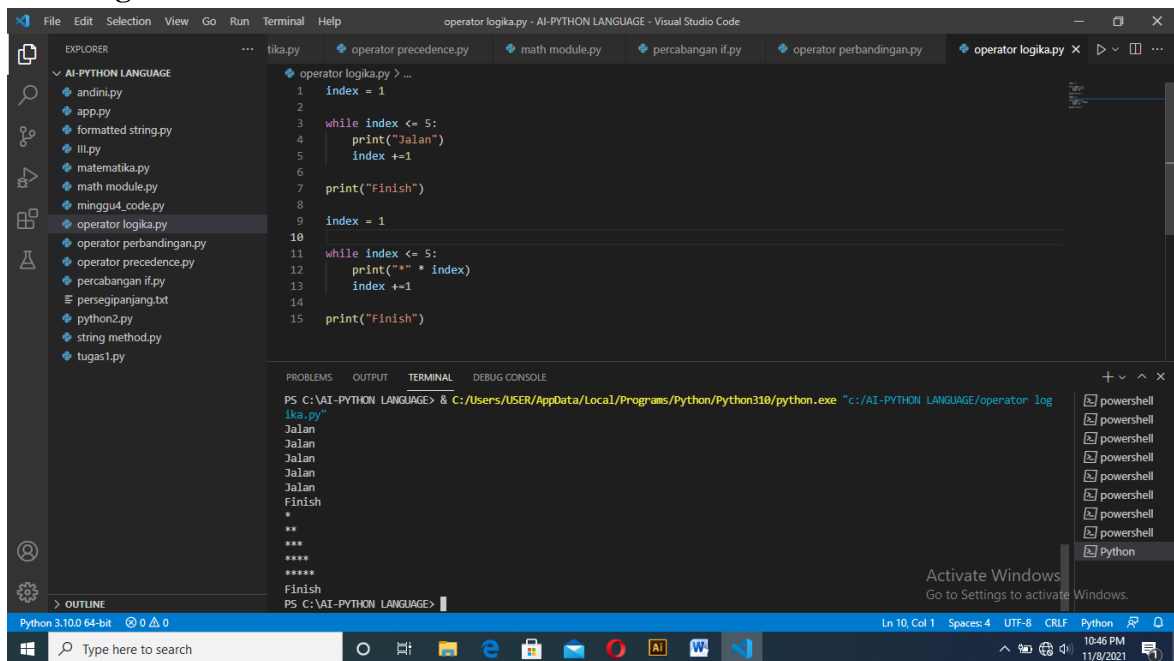
The screenshot shows the Visual Studio Code interface with a Python file named `operator logika.py` open. The file contains a script that checks if a name is longer than 5 characters or passes a validation. The terminal shows the execution of the script, which prints "Welcome" for the name "Andini Wulandari".

```
1 name = " Andini Wulandari"
2
3 if len(name) > 5 or by_pass_validation :
4     print("Welcome")
5 else:
6     print("Nama terlalu pendek")
```

Terminal Output:

```
PS C:\AI-PYTHON LANGUAGE> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe "c:/AI-PYTHON LANGUAGE/operator logika.py"
Welcome
PS C:\AI-PYTHON LANGUAGE> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe "c:/AI-PYTHON LANGUAGE/operator logika.py"
Welcome
PS C:\AI-PYTHON LANGUAGE>
```

### 4. Perulangan While



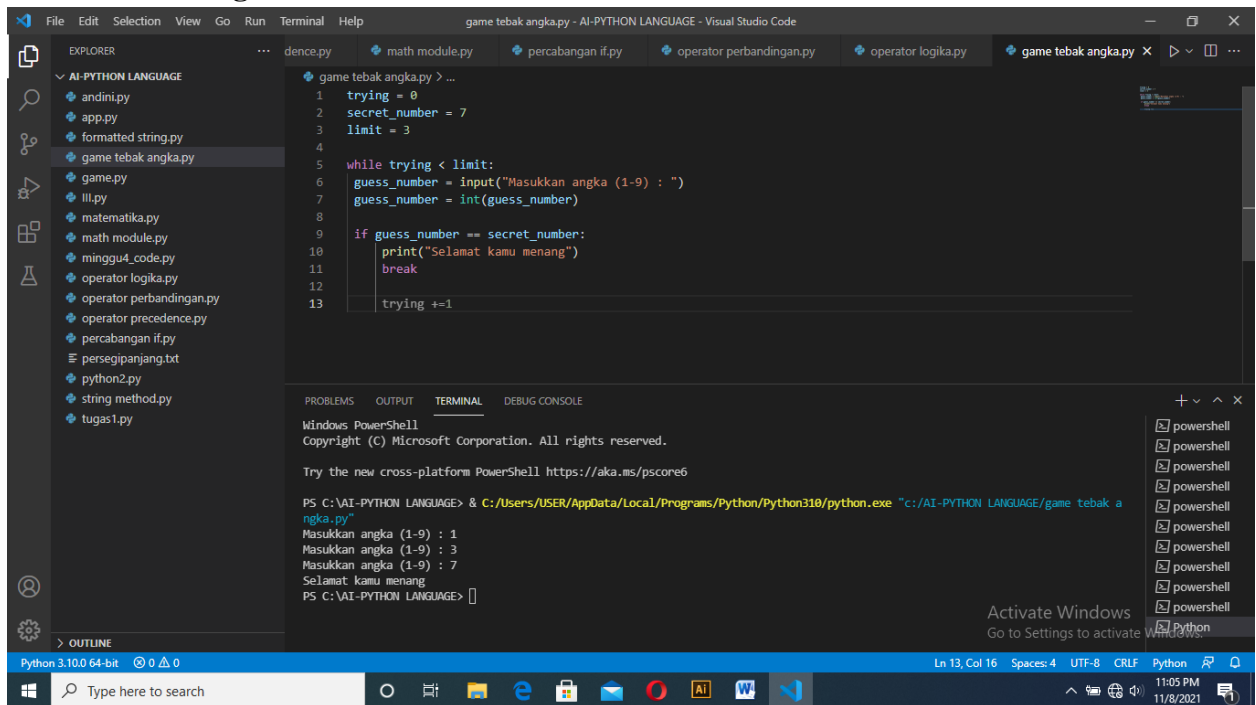
The screenshot shows the Visual Studio Code interface with a Python file named `operator logika.py` open. The file contains a script that uses while loops to print "Jalan" and "Finish" five times each. The terminal shows the execution of the script, which prints "Jalan" and "Finish" five times each.

```
1 index = 1
2
3 while index <= 5:
4     print("Jalan")
5     index +=1
6
7 print("Finish")
8
9 index = 1
10
11 while index <= 5:
12     print("*****")
13     index +=1
14
15 print("Finish")
```

Terminal Output:

```
PS C:\AI-PYTHON LANGUAGE> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe "c:/AI-PYTHON LANGUAGE/operator logika.py"
Jalan
Jalan
Jalan
Jalan
Jalan
Finish
*****
*****
*****
*****
*****
Finish
PS C:\AI-PYTHON LANGUAGE>
```

## 5. Game Tebak Angka



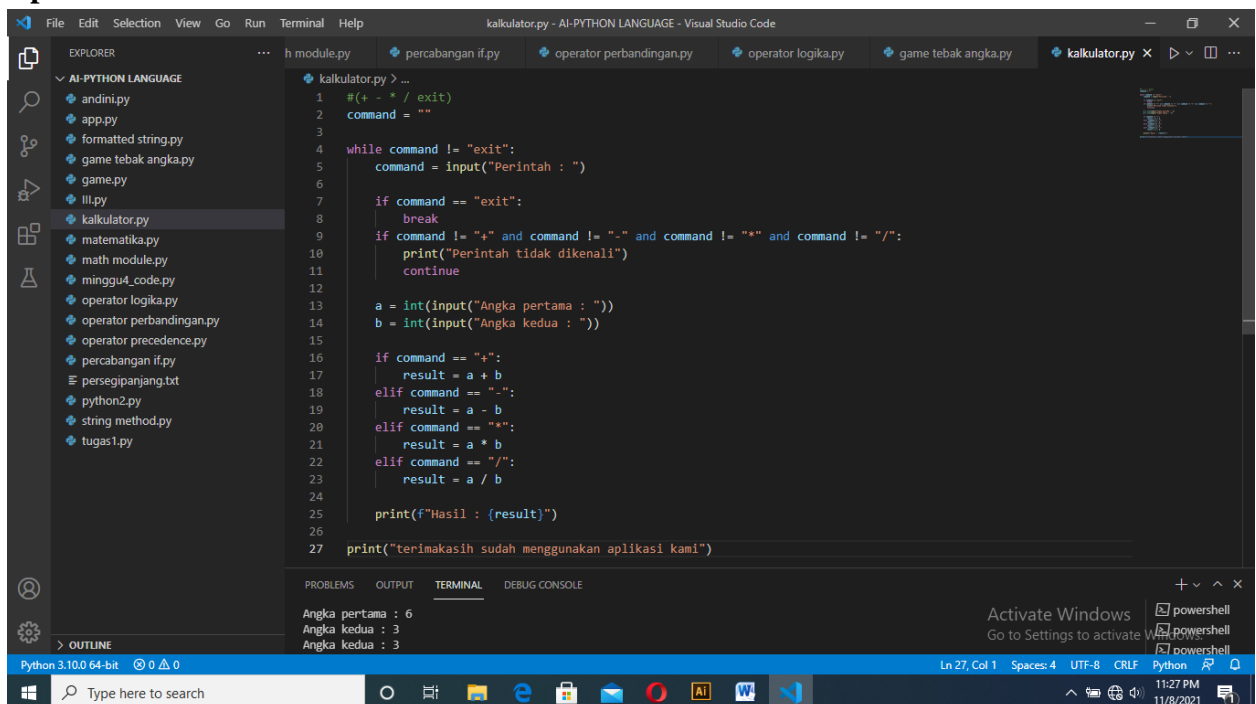
The screenshot shows the Visual Studio Code interface with the file explorer on the left displaying a project named 'AI-PYTHON LANGUAGE'. The file 'game tebak angka.py' is selected. The main editor shows the following Python code:

```
1 trying = 0
2 secret_number = 7
3 limit = 3
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
```

The terminal at the bottom shows the execution of the program in a Windows PowerShell environment. The output is as follows:

```
PS C:\AI-PYTHON LANGUAGE> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe "c:/AI-PYTHON LANGUAGE/game tebak a
ngka.py"
Masukkan angka (1-9) : 1
Masukkan angka (1-9) : 3
Masukkan angka (1-9) : 7
Selamat kamu menang
PS C:\AI-PYTHON LANGUAGE>
```

## 6. Aplikasi Kalkulator



The screenshot shows the Visual Studio Code interface with the file explorer on the left displaying a project named 'AI-PYTHON LANGUAGE'. The file 'kalkulator.py' is selected. The main editor shows the following Python code:

```
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}")
27
28 print("terimakasih sudah menggunakan aplikasi kami")
```

The terminal at the bottom shows the execution of the program in a Windows PowerShell environment. The output is as follows:

```
Angka pertama : 6
Angka kedua : 3
Angka kedua : 3
```

Output

