

# TUGAS PRAKTIKUM #3 (ARTIFICIAL INTELLIGENCE)

ANGGA DWI WIBOWO

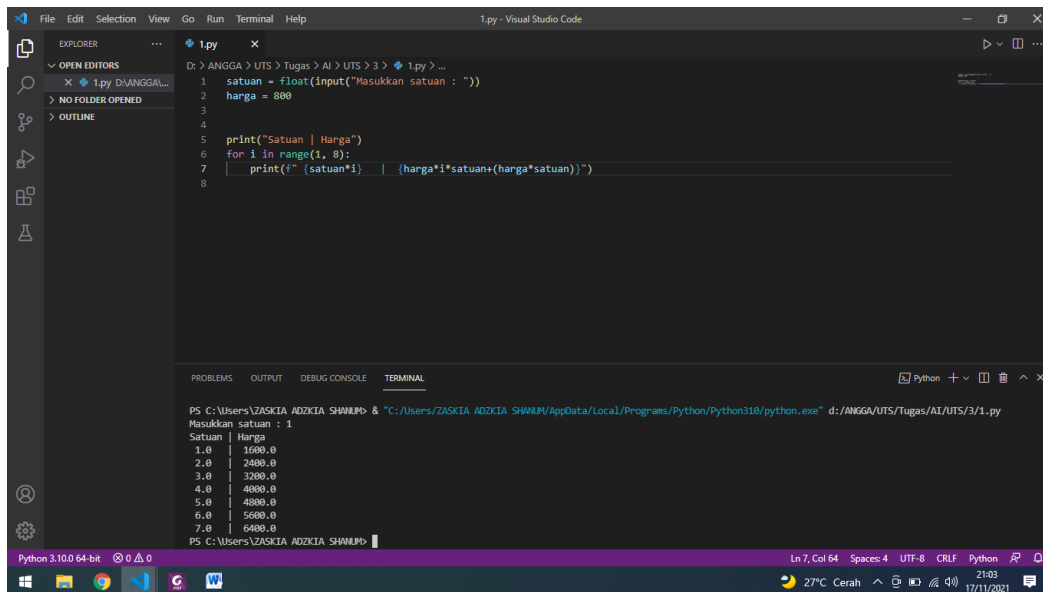
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## 6.6 Praktikum #1



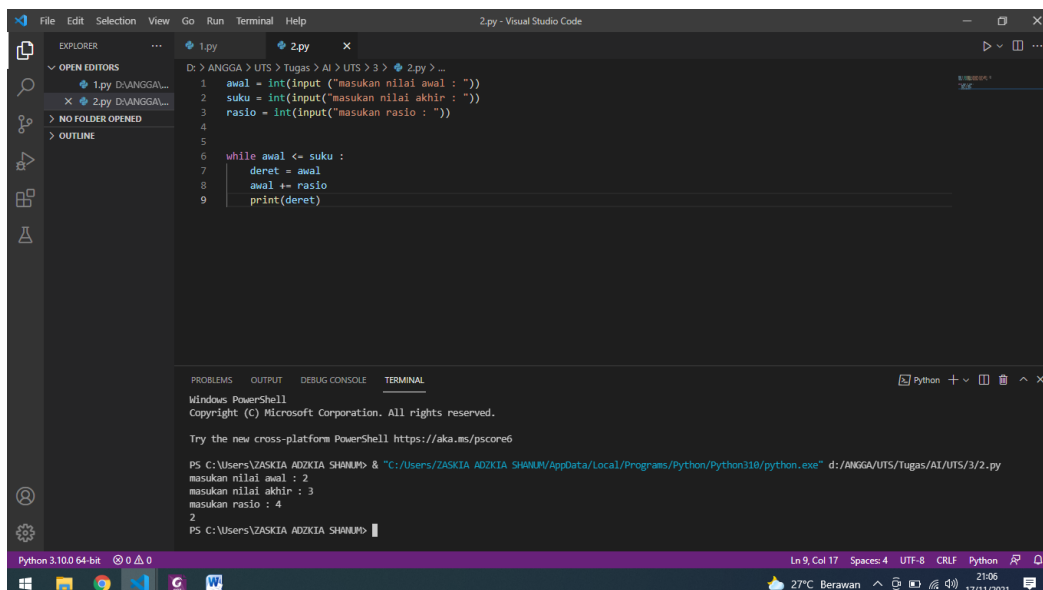
The screenshot shows a Visual Studio Code editor with a Python file named `1.py`. The code defines a function `hitung` that takes two arguments, `satuan` and `harga`, and returns a list of values for `satuan` from 1 to 8, along with the calculated total price. The terminal output shows the function being called with `satuan = 1` and `harga = 800`, resulting in a list of values for `satuan` and the total price.

```
1.py
1 satuan = float(input("Masukkan satuan : "))
2 harga = 800
3
4
5 print("Satuan | Harga")
6 for i in range(1, 8):
7     print(f" {satuan*i} | {harga*i*satuan+(harga*satuan)}")
8
```

Terminal Output:

```
PS C:\Users\ZASKIA ADZKIA SHANUM> "C:\Users\ZASKIA ADZKIA SHANUM\AppData\Local\Programs\Python\Python310\python.exe" d:/ANGGA/UTS/Tugas/AI/UTS/3/1.py
Masukkan satuan : 1
Satuan | Harga
1.0 | 1600.0
2.0 | 2400.0
3.0 | 3200.0
4.0 | 4000.0
5.0 | 4800.0
6.0 | 5600.0
7.0 | 6400.0
PS C:\Users\ZASKIA ADZKIA SHANUM>
```

## Praktikum #2



The screenshot shows a Visual Studio Code editor with a Python file named `2.py`. The code defines a function `hitung` that takes two arguments, `awal` and `suku`, and returns a list of values for `awal` from 1 to `suku`, along with the calculated total price. The terminal output shows the function being called with `awal = 2` and `suku = 3`, resulting in a list of values for `awal` and the total price.

```
2.py
1 awal = int(input("masukan nilai awal : "))
2 suku = int(input("masukan nilai akhir : "))
3 rasio = int(input("masukan rasio : "))
4
5
6 while awal <= suku :
7     deret = awal
8     awal += rasio
9     print(deret)
```

Terminal Output:

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

PS C:\Users\ZASKIA ADZKIA SHANUM> "C:\Users\ZASKIA ADZKIA SHANUM\AppData\Local\Programs\Python\Python310\python.exe" d:/ANGGA/UTS/Tugas/AI/UTS/3/2.py
masukan nilai awal : 2
masukan nilai akhir : 3
masukan rasio : 4
2
PS C:\Users\ZASKIA ADZKIA SHANUM>
```

## Praktikum #3

The screenshot shows the Visual Studio Code interface with a Python file named 3.py open. The code calculates the average of 5 numbers entered by the user. The terminal shows the execution of the script, which prompts the user to enter 5 numbers and then displays the total and the average.

```
D:\> ANGGA > UTS > Tugas > AI > UTS > 3 > 3.py > ...
1 data = int(input("Jumlah angka : "))
2
3 lis = []
4
5 for i in range(1, data+1):
6     p = int(input(f"Angka {i} : "))
7     lis.append(p)
8 print(f"Total : {sum(lis)}")
9 print(f"Rata-rata : {sum(lis)/data}")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

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PS C:\Users\ZASKIA ADZKIA SHAMUD > "C:/Users/ZASKIA ADZKIA SHAMUD/AppData/Local/Programs/Python/Python310/python.exe" d:/ANGGA/UTS/Tugas/AI/UTS/3/3.py

Jumlah angka : 5  
Angka 1 : 8  
Angka 2 : 9  
Angka 3 : 6  
Angka 4 : 6  
Angka 5 : 7  
Total : 36  
Rata-rata : 7.2  
PS C:\Users\ZASKIA ADZKIA SHAMUD >

## Praktikum #4

The screenshot shows the Visual Studio Code interface with a Python file named 4.py open. The code calculates the power of a number x raised to the power of y. The terminal shows the execution of the script, which prompts the user to enter a real number x and an integer y, and then displays the result of x raised to the power of y.

```
D:\> ANGGA > UTS > Tugas > AI > UTS > 3 > 4.py > ...
1 x = float(input("Masukkan bilangan real (x) : "))
2 y = int(input("Masukkan bilangan bulat (y) : "))
3
4 z = x ** y
5 print(f"maka jumlah pangkat (x pangkat y) = {z}")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

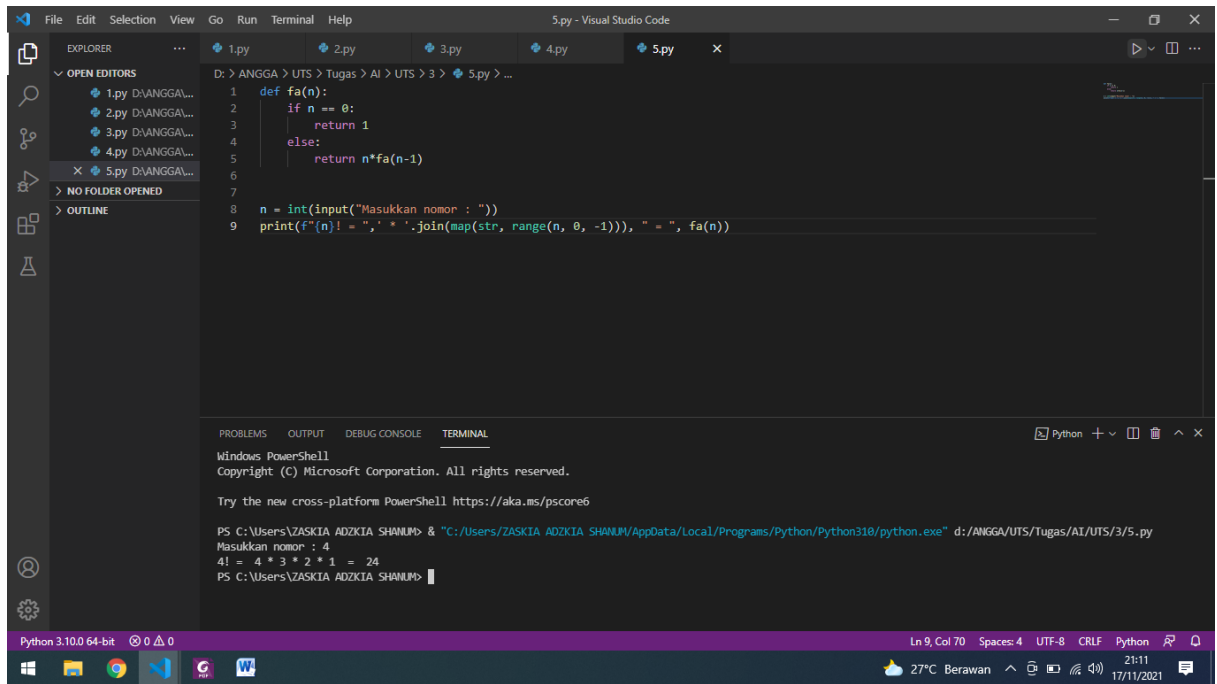
Windows PowerShell  
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Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS C:\Users\ZASKIA ADZKIA SHAMUD > "C:/Users/ZASKIA ADZKIA SHAMUD/AppData/Local/Programs/Python/Python310/python.exe" d:/ANGGA/UTS/Tugas/AI/UTS/3/4.py

Masukkan bilangan real (x) : 2  
Masukkan bilangan bulat (y) : 2  
maka jumlah pangkat (x pangkat y) = 4.0  
PS C:\Users\ZASKIA ADZKIA SHAMUD >

## Praktikum #5



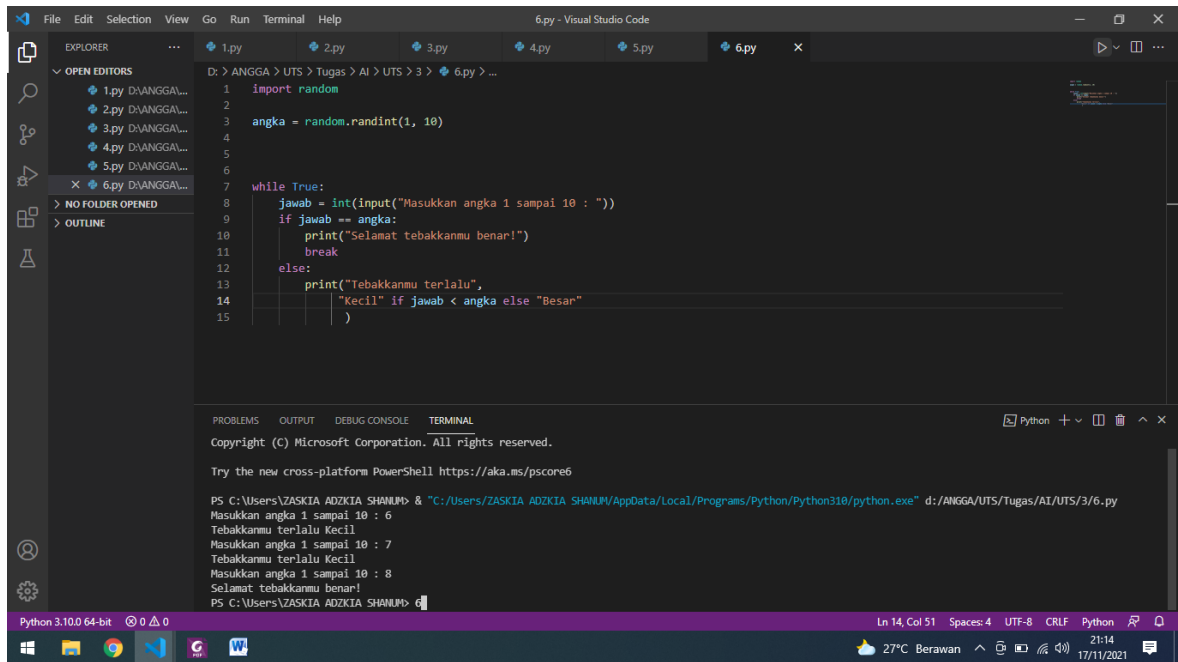
The screenshot shows the Visual Studio Code interface with a Python file named 5.py. The code defines a function `fa(n)` that calculates the factorial of `n` using a recursive approach. It then prompts the user to enter a number and prints the result.

```
1 def fa(n):
2     if n == 0:
3         return 1
4     else:
5         return n*fa(n-1)
6
7
8 n = int(input("Masukkan nomor : "))
9 print(f"{n}! = ", ' * '.join(map(str, range(n, 0, -1))), " = ", fa(n))
```

The terminal output shows the execution of the script:

```
PS C:\Users\ZASKIA ADZKIA SHANUM> & "C:/Users/ZASKIA ADZKIA SHANUM/AppData/Local/Programs/Python/Python310/python.exe" d:/ANGGA/UTS/Tugas/AI/UTS/3/5.py
Masukkan nomor : 4
4! = 4 * 3 * 2 * 1 = 24
PS C:\Users\ZASKIA ADZKIA SHANUM>
```

## Praktikum #6



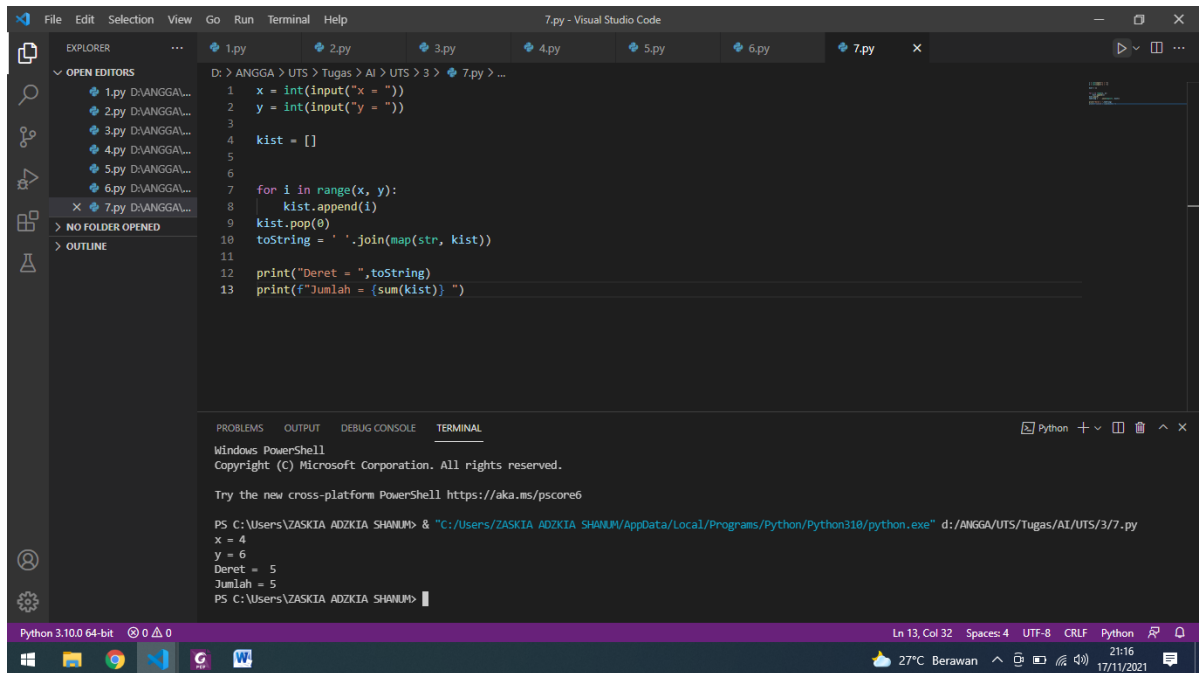
The screenshot shows the Visual Studio Code interface with a Python file named 6.py. The code implements a number guessing game where the user is prompted to guess a number between 1 and 10. The program provides feedback on whether the guess is too low, too high, or correct.

```
1 import random
2
3 angka = random.randint(1, 10)
4
5
6
7 while True:
8     jawab = int(input("Masukkan angka 1 sampai 10 : "))
9     if jawab == angka:
10        print("Selamat tebakkamu benar!")
11        break
12    else:
13        print("Tebakkamu terlalu",
14              "Kecil if jawab < angka else \"Besar\"")
15
```

The terminal output shows the execution of the script:

```
PS C:\Users\ZASKIA ADZKIA SHANUM> & "C:/Users/ZASKIA ADZKIA SHANUM/AppData/Local/Programs/Python/Python310/python.exe" d:/ANGGA/UTS/Tugas/AI/UTS/3/6.py
Masukkan angka 1 sampai 10 : 6
Tebakkamu terlalu Kecil
Masukkan angka 1 sampai 10 : 7
Tebakkamu terlalu Kecil
Masukkan angka 1 sampai 10 : 8
Selamat tebakkamu benar!
PS C:\Users\ZASKIA ADZKIA SHANUM>
```

## Praktikum #7



The screenshot shows the Visual Studio Code interface with a Python file named 7.py. The code in the editor is as follows:

```
D: > ANGGA > UTS > Tugas > AI > UTS > 3 > 7.py > ...
1  x = int(input("x = "))
2  y = int(input("y = "))
3
4  kist = []
5
6
7  for i in range(x, y):
8      kist.append(i)
9  kist.pop(0)
10 toString = ' '.join(map(str, kist))
11
12 print("Deret = ", toString)
13 print(f"Jumlah = {sum(kist)} ")
```

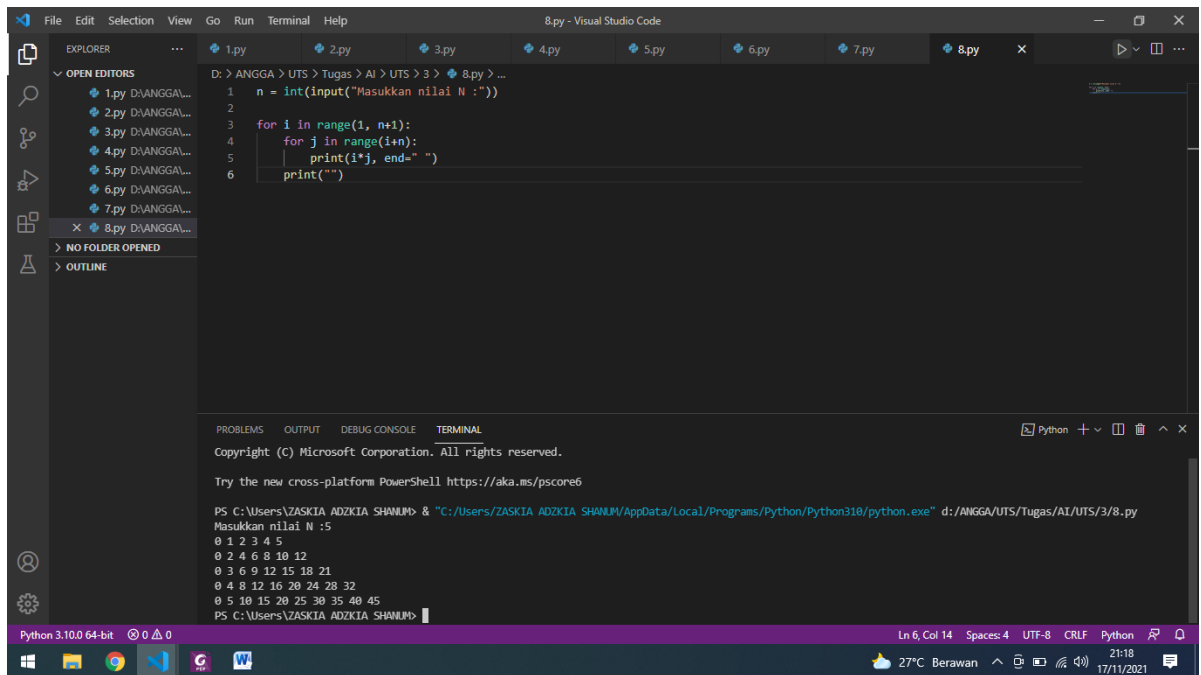
The terminal output shows the execution of the script:

```
Windows PowerShell
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PS C:\Users\ZASKIA ADZKIA SHANUM> & "C:/Users/ZASKIA ADZKIA SHANUM/AppData/Local/Programs/Python/Python310/python.exe" d:/ANGGA/UTS/Tugas/AI/UTS/3/7.py
x = 4
y = 6
Deret = 4 5
Jumlah = 5
PS C:\Users\ZASKIA ADZKIA SHANUM>
```

## Praktikum #8



The screenshot shows the Visual Studio Code interface with a Python file named 8.py. The code in the editor is as follows:

```
D: > ANGGA > UTS > Tugas > AI > UTS > 3 > 8.py > ...
1  n = int(input("Masukkan nilai N :"))
2
3  for i in range(1, n+1):
4      for j in range(1, n+1):
5          print(i*j, end=" ")
6      print("")
```

The terminal output shows the execution of the script:

```
Windows PowerShell
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PS C:\Users\ZASKIA ADZKIA SHANUM> & "C:/Users/ZASKIA ADZKIA SHANUM/AppData/Local/Programs/Python/Python310/python.exe" d:/ANGGA/UTS/Tugas/AI/UTS/3/8.py
Masukkan nilai N : 5
0 1 2 3 4 5
0 2 4 6 8 10 12
0 3 6 9 12 15 18 21
0 4 8 12 16 20 24 28 32
0 5 10 15 20 25 30 35 40 45
PS C:\Users\ZASKIA ADZKIA SHANUM>
```