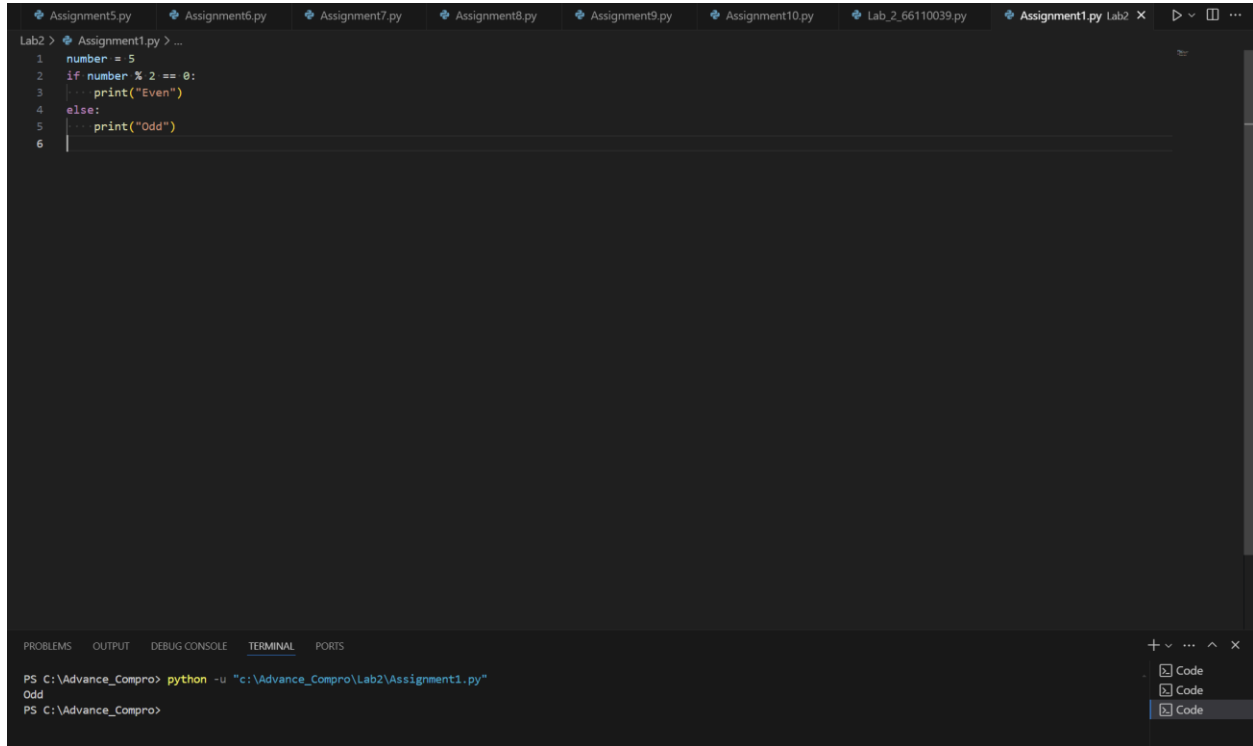


Lab 2

1.



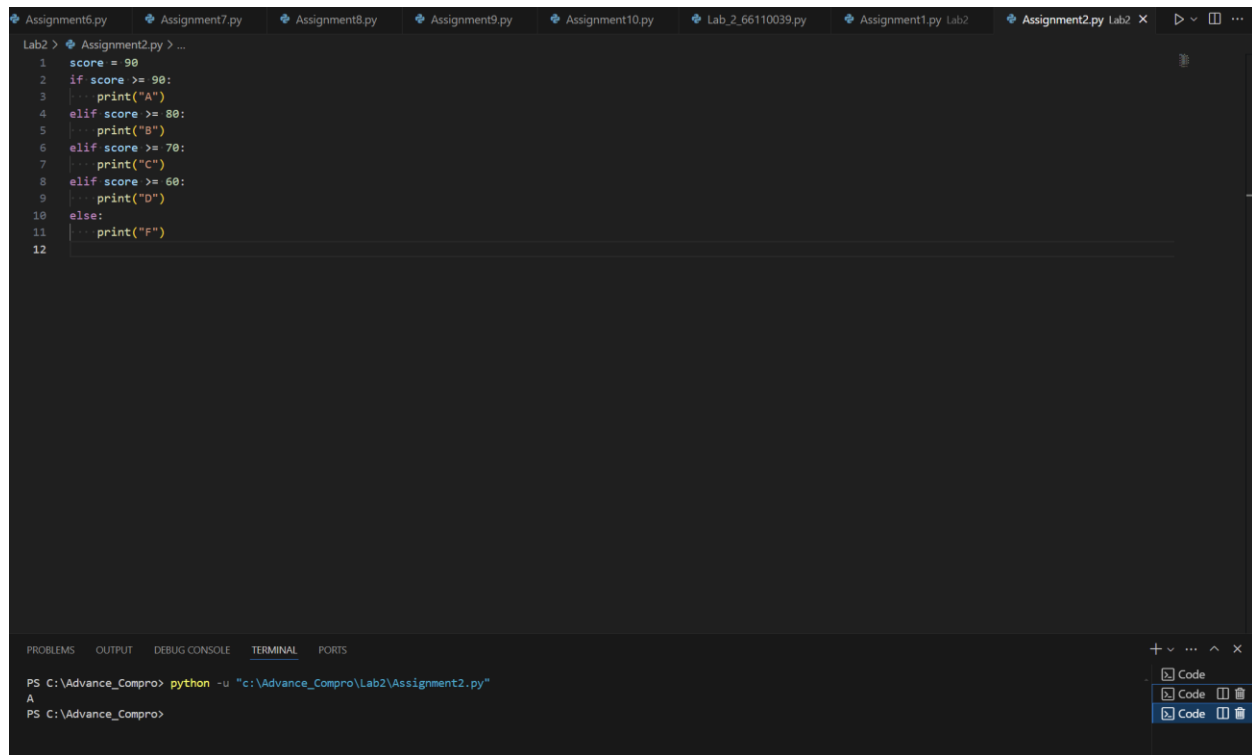
The screenshot shows a Visual Studio Code editor window with a dark theme. The top panel displays a file explorer with several Python files: Assignment5.py, Assignment6.py, Assignment7.py, Assignment8.py, Assignment9.py, Assignment10.py, Lab_2_66110039.py, and Assignment1.py Lab2 X. The main editor area shows the content of Assignment1.py, which contains a Python script to check if a number is even or odd. The script sets a variable 'number' to 5 and uses an if-else statement to print 'Even' or 'Odd'. The bottom panel shows the TERMINAL output, which displays the command 'python -u "c:\Advance_Copro\Lab2\Assignment1.py"' and the output 'Odd'.

```
Lab2 > Assignment1.py > ...
1  number = 5
2  if number % 2 == 0:
3      print("Even")
4  else:
5      print("Odd")
6
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Advance_Copro> python -u "c:\Advance_Copro\Lab2\Assignment1.py"
Odd
PS C:\Advance_Copro>
```

2.



The screenshot shows a VS Code editor with a file explorer at the top displaying several Python files. The active file is 'Assignment2.py', which contains a Python script that assigns a score of 90 and prints a grade based on the score. The script uses a series of if-elif-else statements to determine the grade: 'A' for scores of 90 and above, 'B' for 80 and above, 'C' for 70 and above, 'D' for 60 and above, and 'F' for scores below 60. The terminal at the bottom shows the command 'python -u "c:\Advance_Copro\Lab2\Assignment2.py"' being executed, resulting in the output 'A'.

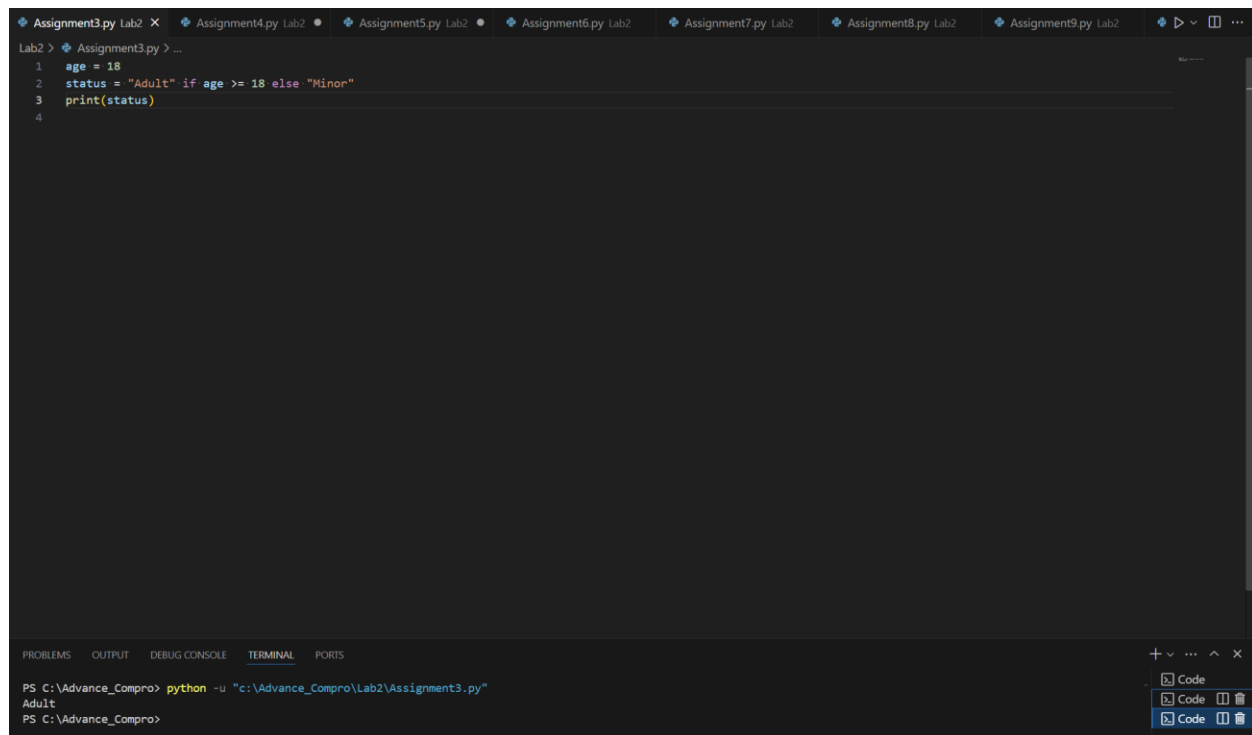
```
1 score = 90
2 if score >= 90:
3     print("A")
4 elif score >= 80:
5     print("B")
6 elif score >= 70:
7     print("C")
8 elif score >= 60:
9     print("D")
10 else:
11     print("F")
12
```

PS C:\Advance_Copro> python -u "c:\Advance_Copro\Lab2\Assignment2.py"

A

PS C:\Advance_Copro>

3.



The screenshot shows a VS Code editor with a file explorer at the top displaying several Python files. The active file is 'Assignment3.py', which contains a Python script that assigns an age of 18 and prints a status based on the age. The script uses a single if-else statement to determine the status: 'Adult' for ages of 18 and above, and 'Minor' for ages below 18. The terminal at the bottom shows the command 'python -u "c:\Advance_Copro\Lab2\Assignment3.py"' being executed, resulting in the output 'Adult'.

```
1 age = 18
2 status = "Adult" if age >= 18 else "Minor"
3 print(status)
4
```

PS C:\Advance_Copro> python -u "c:\Advance_Copro\Lab2\Assignment3.py"

Adult

PS C:\Advance_Copro>

4.

```
Lab2 > Assignment4.py > ...
1 numbers = [1, 2, 3, 4, 5]
2 modified_number = [n+10 if n % 2 == 0 else n-1 for n in numbers]
3 print(numbers, modified_number)
4
```

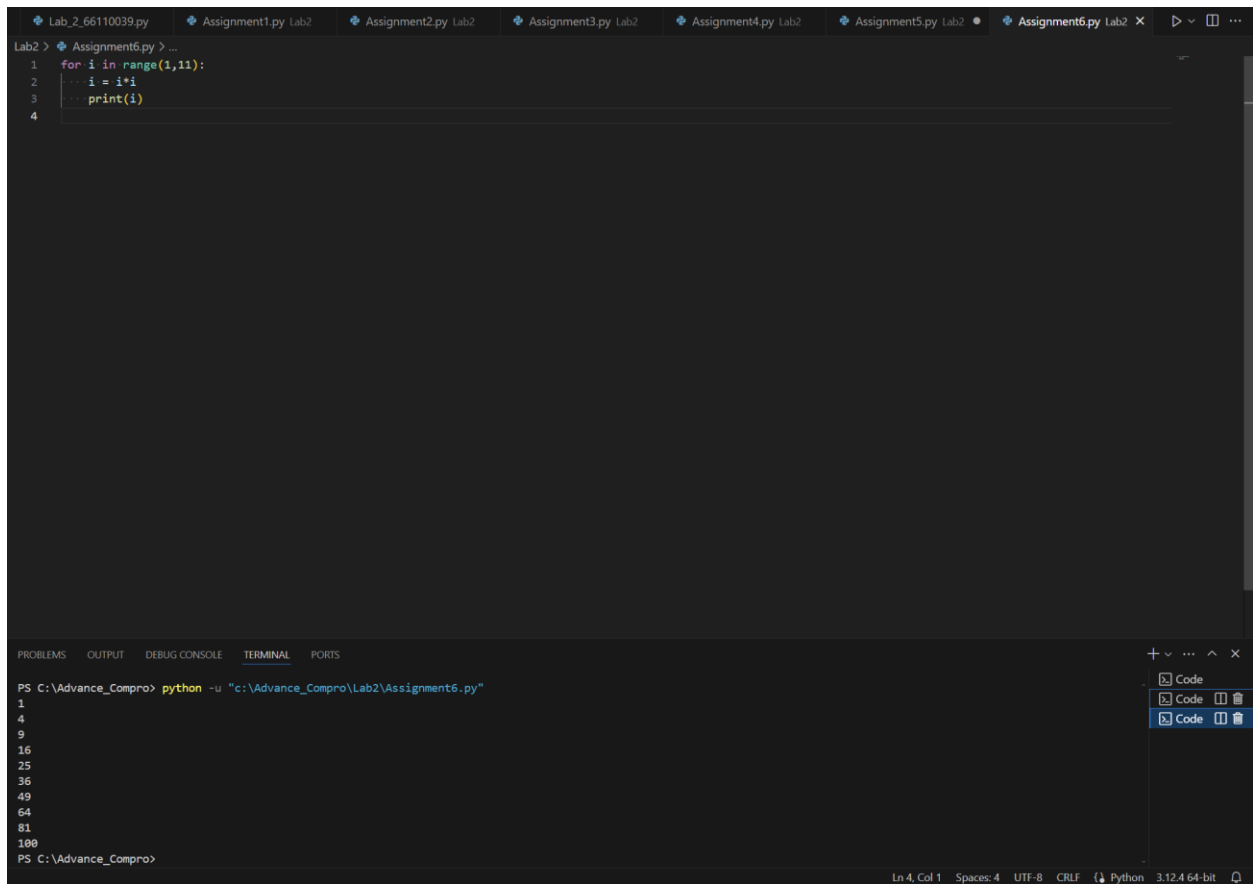
```
PS C:\Advance_Copro> python -u "c:\Advance_Copro\Lab2\Assignment4.py"
[1, 2, 3, 4, 5] [0, 12, 2, 14, 4]
PS C:\Advance_Copro>
```

5.

```
Lab2 > Assignment5.py > ...
1 fruits = ["apple", "banana", "cherry"]
2 for fruit in fruits:
3     print(fruit)
4
5
```

```
PS C:\Advance_Copro> python -u "c:\Advance_Copro\Lab2\Assignment5.py"
apple
banana
cherry
PS C:\Advance_Copro>
```

6.



The image shows a Visual Studio Code editor window with a dark theme. The top panel contains several tabs: 'Lab_2_66110039.py', 'Assignment1.py Lab2', 'Assignment2.py Lab2', 'Assignment3.py Lab2', 'Assignment4.py Lab2', 'Assignment5.py Lab2', and 'Assignment6.py Lab2'. The 'Assignment6.py Lab2' tab is active, displaying a Python script:

```
1 for i in range(1,11):
2     ... i = i*i
3     ... print(i)
4
```

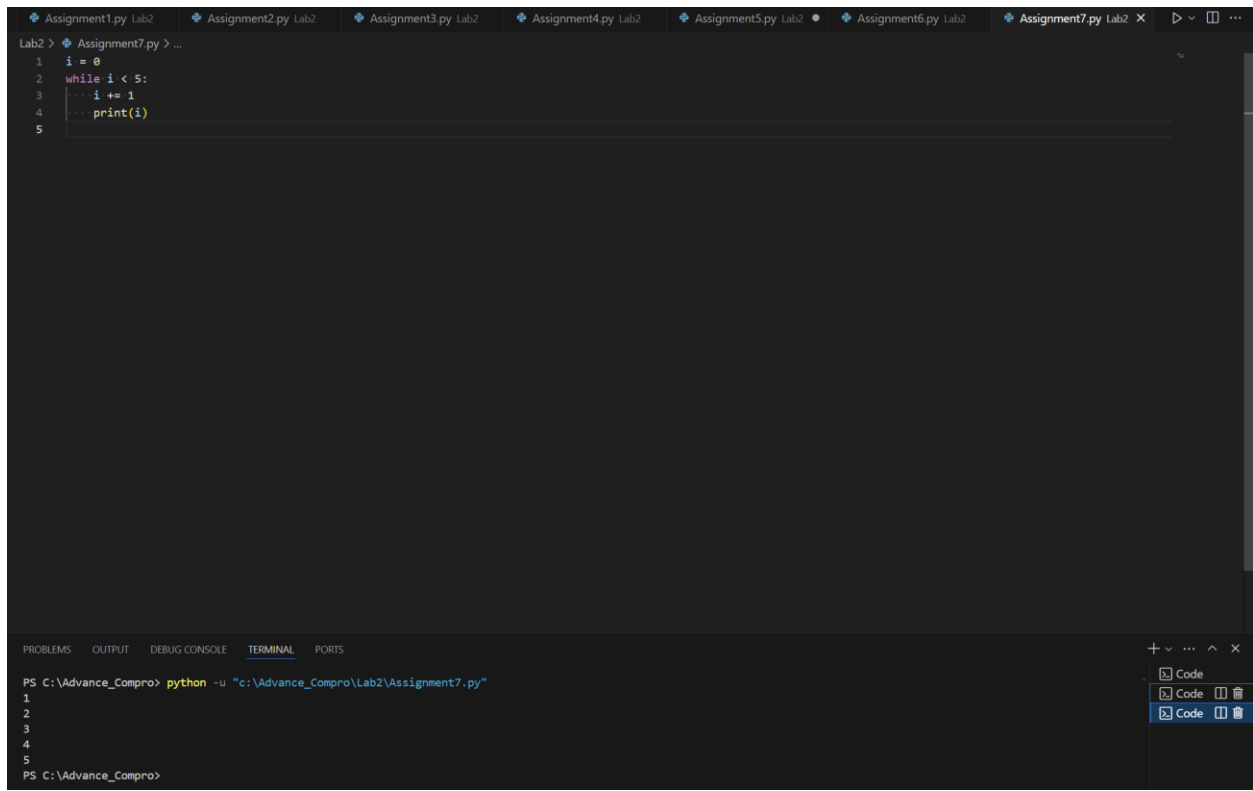
The bottom panel is divided into 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', 'TERMINAL', and 'PORTS'. The 'TERMINAL' tab is active, showing the command prompt output of running the script:

```
PS C:\Advance_Compro> python -u "c:\Advance_Compro\Lab2\Assignment6.py"
1
4
9
16
25
36
49
64
81
100
PS C:\Advance_Compro>
```

On the right side of the terminal, there is a 'Code' button and a 'Code' button with a 'Code' icon and a 'Code' icon.

Ln 4, Col 1 Spaces: 4 UTF-8 CRLF Python 3.12.4 64-bit

7.



The image shows a Visual Studio Code editor window with a dark theme. The top panel contains several tabs for Python files, with 'Assignment7.py Lab2' selected. The editor area displays the following Python code:

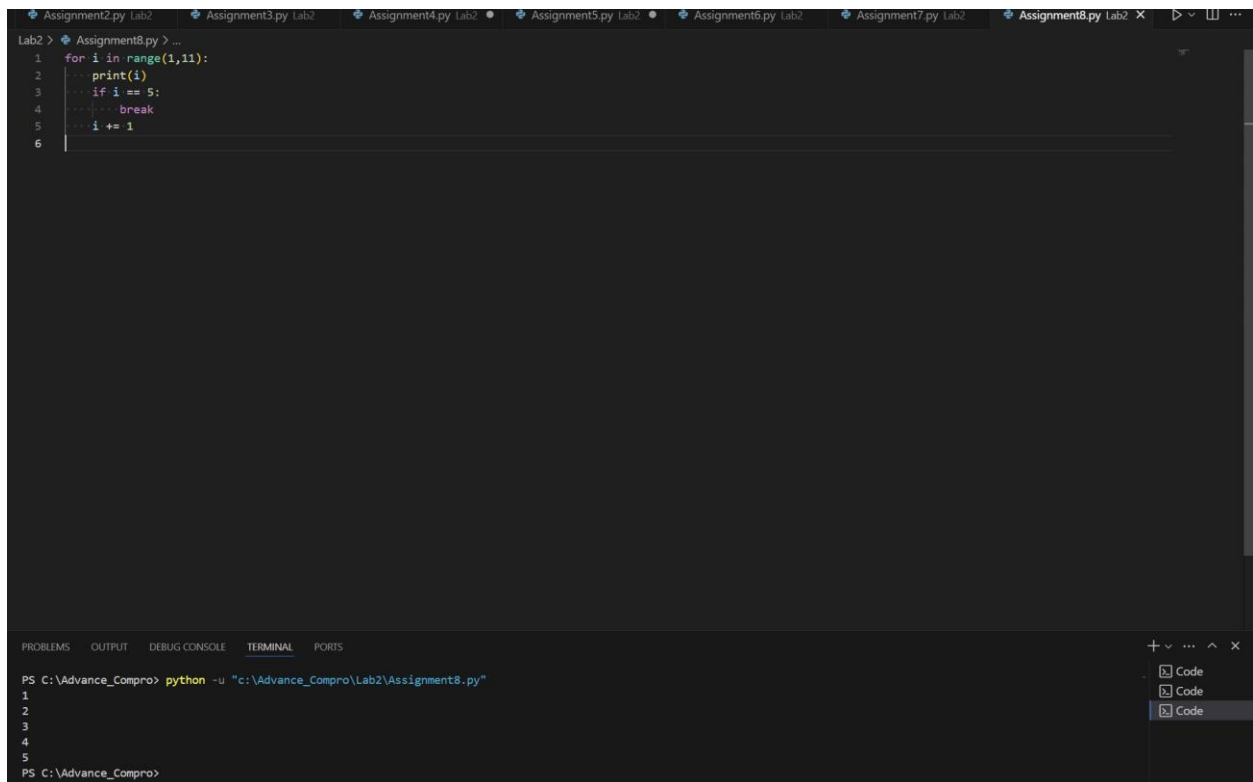
```
1 i = 0
2 while i < 5:
3     i += 1
4     print(i)
5
```

The bottom panel shows the 'TERMINAL' tab with the command prompt output:

```
PS C:\Advance_Copro> python -u "c:\Advance_Copro\Lab2\Assignment7.py"
1
2
3
4
5
PS C:\Advance_Copro>
```

On the right side of the terminal panel, there is a 'Code' button and a list of three 'Code' entries, each with a file icon and a trash icon.

8.



The image shows a Visual Studio Code editor window with a dark theme. The top panel displays a file explorer with several Python files named 'Assignment2.py Lab2' through 'Assignment8.py Lab2'. The 'Assignment8.py Lab2' file is selected and open in the editor. The code in the editor is as follows:

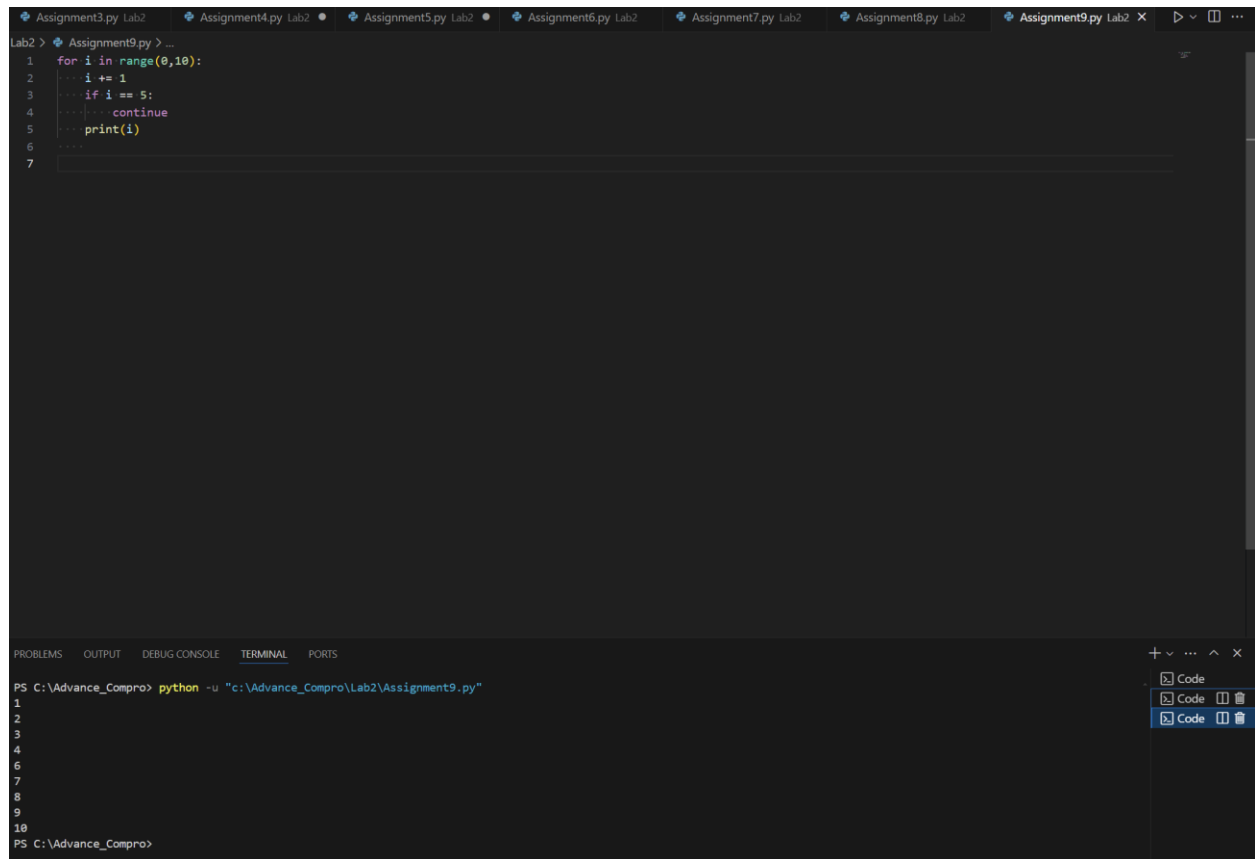
```
1 for i in range(1,11):
2     print(i)
3     if i == 5:
4         break
5     i += 1
6
```

The bottom panel shows the 'TERMINAL' tab, which contains the command to run the script and its output:

```
PS C:\Advance_Compro> python -u "c:\Advance_Compro\Lab2\Assignment8.py"
1
2
3
4
5
PS C:\Advance_Compro>
```

On the right side of the terminal panel, there is a vertical stack of three 'Code' buttons, each with a document icon.

9.



The image shows a Visual Studio Code editor window with a dark theme. The top of the window has a tab bar with several tabs labeled 'Assignment3.py Lab2', 'Assignment4.py Lab2', 'Assignment5.py Lab2', 'Assignment6.py Lab2', 'Assignment7.py Lab2', 'Assignment8.py Lab2', and 'Assignment9.py Lab2'. The 'Assignment9.py Lab2' tab is active. The editor area displays a Python script with the following code:

```
1 for i in range(0,10):
2     i += 1
3     if i == 5:
4         continue
5     print(i)
6
7
```

Below the editor is a panel with tabs for 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', 'TERMINAL', and 'PORTS'. The 'TERMINAL' tab is selected. The terminal shows the command to run the script:

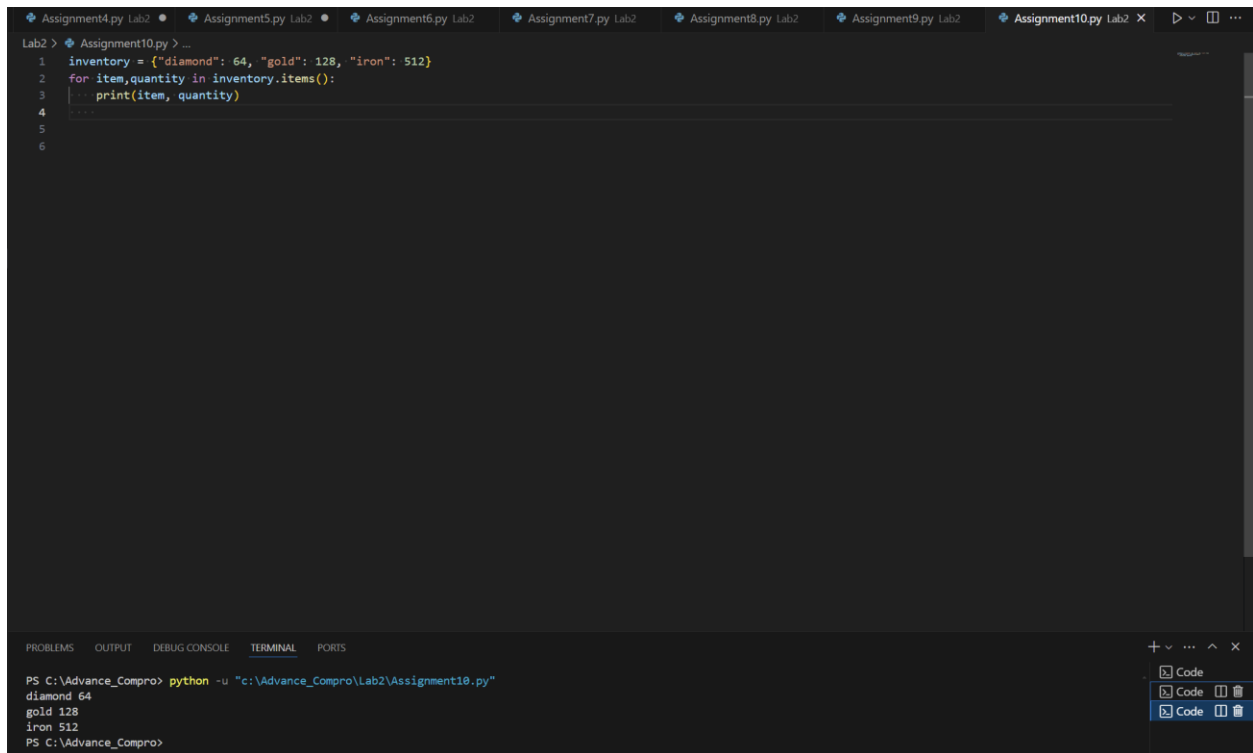
```
PS C:\Advance_Compro> python -u "c:\Advance_Compro\Lab2\Assignment9.py"
```

Below the command, the output of the script is shown, with line numbers 1 through 10 on the left:

```
1
2
3
4
5
6
7
8
9
10
```

The terminal prompt is 'PS C:\Advance_Compro>'. On the right side of the terminal panel, there is a vertical toolbar with icons for 'Code', 'Code', 'Code', and 'Code'.

10.



The image shows a Visual Studio Code editor window with a dark theme. The top bar displays several open files, with 'Assignment10.py Lab2' selected. The editor area contains a Python script with the following code:

```
1 inventory = {"diamond": 64, "gold": 128, "iron": 512}
2 for item, quantity in inventory.items():
3     print(item, quantity)
4
5
6
```

Below the editor, the 'TERMINAL' panel is active, showing the command prompt output of running the script:

```
PS C:\Advance_Compro> python -u "c:\Advance_Compro\Lab2\Assignment10.py"
diamond 64
gold 128
iron 512
PS C:\Advance_Compro>
```

On the right side of the terminal panel, there are icons for 'Code', 'Run and Debug', and 'Test Explorer'.