



NAME: DEEPAK SHARMA

COURSE: BCA-HALDWANI

UNIVERSITY ROLL NO: 20041299

STUDENT ID : 2091299

## Python Programming BCA2ndSemester

### TBC/PBC202 Python

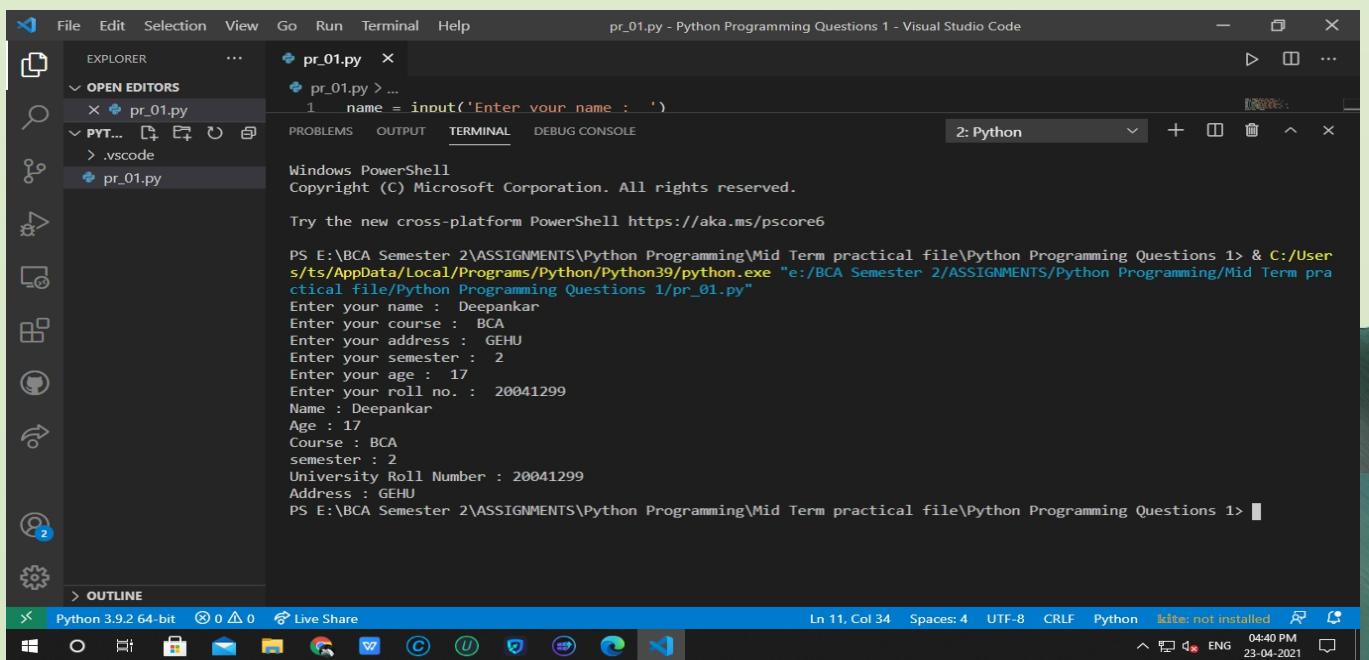
## INDEX

Sr. No.	Assign. Date	Subm. Date	<u>Title</u>	Teacher's Remark
1.		23 APRIL 2021	PYTHON PRACTICAL QUESTIONS 1	
2.		30 APRIL 2021	PYTHON PRACTICAL QUESTIONS 2	
3.		13 MAY 2021	PYTHON PRACTICAL QUESTIONS 3	
4.		13 MAY 2021	PYTHON PRACTICAL QUESTIONS 4	
5.		21 MAY 2021	PYTHON PRACTICAL QUESTIONS 5	
6.		26 MAY 2021	PYTHON PRACTICAL QUESTIONS 6	
7.		27 MAY 2021	PYTHON PRACTICAL QUESTIONS 7	
8.		03 August 2021	PYTHON PRACTICAL QUESTIONS 8	
9.		27 August 2021	PYTHON PRACTICAL QUESTIONS 9	

# Python Programming Questions 1

1. Write a python program to print your name, age, course, semester, address, university roll no.

```
# Deepankar Sharma
# student id : 20041299
# university roll no : 2092014
name = input('Enter your name : ')
course = input('Enter your course : ')
add = input('Enter your address : ')
sem = int(input('Enter your semester : '))
age = int(input('Enter your age : '))
roll =int( input('Enter your roll no. : '))
print('Name :',name)
print('Age :', age)
print('Course :',course)
print('semester :',sem)
print('University Roll Number :',roll)
print('Address :',add)
```



The screenshot shows a Windows desktop environment with Visual Studio Code open. The code editor displays a Python file named 'pr\_01.py' containing the provided program. The terminal tab shows the output of running the program, which prompts for user information and prints it back. The status bar at the bottom provides details about the session, including the Python version (3.9.2), file statistics (Ln 11, Col 34), and system information (Windows 10, ENG, 04:40 PM, 23-04-2021).

```
File Edit Selection View Go Run Terminal Help pr_01.py - Python Programming Questions 1 - Visual Studio Code
EXPLORER OPEN EDITORS pr_01.py > ...
PYT... .vscode pr_01.py
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 1> & C:/Users/sits/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 1/pr_01.py"
Enter your name : Deepankar
Enter your course : BCA
Enter your address : GEHU
Enter your semester : 2
Enter your age : 17
Enter your roll no. : 20041299
Name : Deepankar
Age : 17
Course : BCA
semester : 2
University Roll Number : 20041299
Address : GEHU
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 1>
```

Python 3.9.2 64-bit 0 △ 0 Live Share Ln 11, Col 34 Spaces: 4 UTF-8 CRLF Python kite: not installed 04:40 PM 23-04-2021

## 2. Write a python program to swap two numbers without using any third variable.

```
# Deepankar Sharma
# student id : 20041299
# university roll no : 2092014
a1 = int(input('Enter the first number :'))
a2 = int(input('Enter the second number :'))
a2=a1+a2
a1=a2-a1
a2=a2-a1
print('Swapped')
print(a1,a2)
```



A screenshot of the Visual Studio Code (VS Code) interface showing a Python script named `pr_02.py`. The code swaps two numbers without using a third variable. The terminal window shows the execution of the script and its output. The status bar at the bottom indicates Python 3.9.2 64-bit, and the system tray shows the date and time as 23-04-2021 04:50 PM.

```
File Edit Selection View Go Run Terminal Help pr_02.py - Python Programming Questions 1 - Visual Studio Code
EXPLORER ... pr_01.py pr_01_02.PNG (read-only) pr_02.py
OPEN EDITORS pr_02.py ...
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 1> & C:/Users/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 1/pr_02.py"
Enter the first number :23
Enter the second number :2345
Swapped
2345 23
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 1>

```

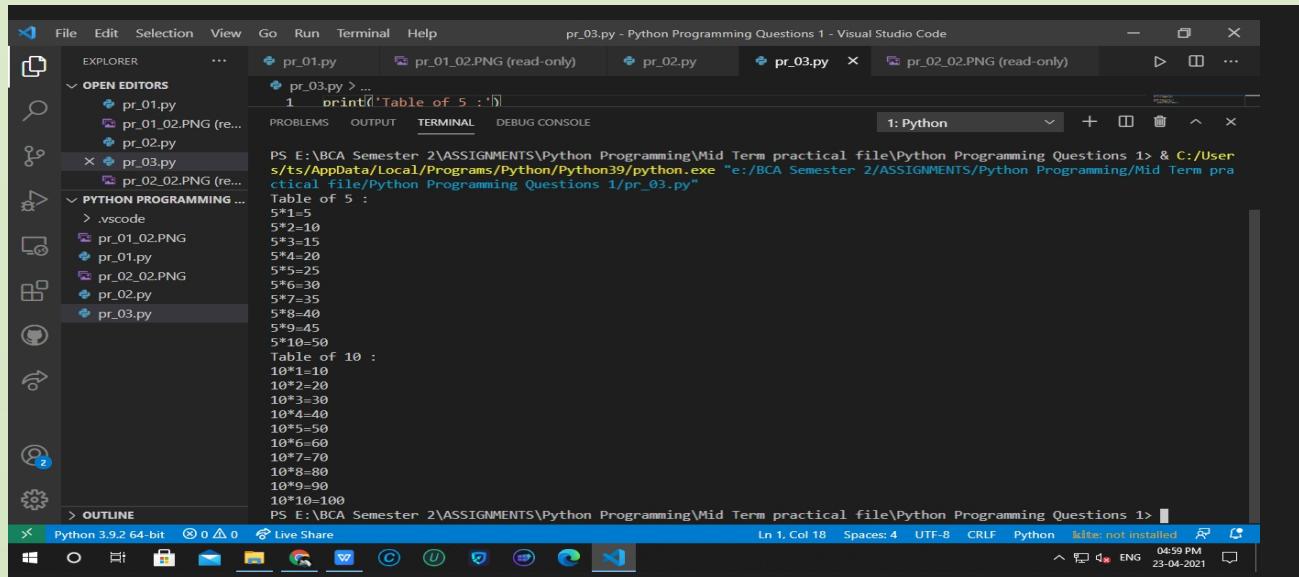
Python 3.9.2 64-bit 0 △ 0 Live Share Ln 7, Col 13 Spaces: 4 CRLF Python kite: not installed 04:50 PM 23-04-2021 ENG

### 3. Write a python program to print the tables of 5 and 10.

```
# Deepankar Sharma
# student id : 20041299
# university roll no : 2092014

print('Table of 5 :')
print(f'5*{1}={5*1}')
print(f'5*{2}={5*2}')
print(f'5*{3}={5*3}')
print(f'5*{4}={5*4}')
print(f'5*{5}={5*5}')
print(f'5*{6}={5*6}')
print(f'5*{7}={5*7}')
print(f'5*{8}={5*8}')
print(f'5*{9}={5*9}')
print(f'5*{10}={5*10}')

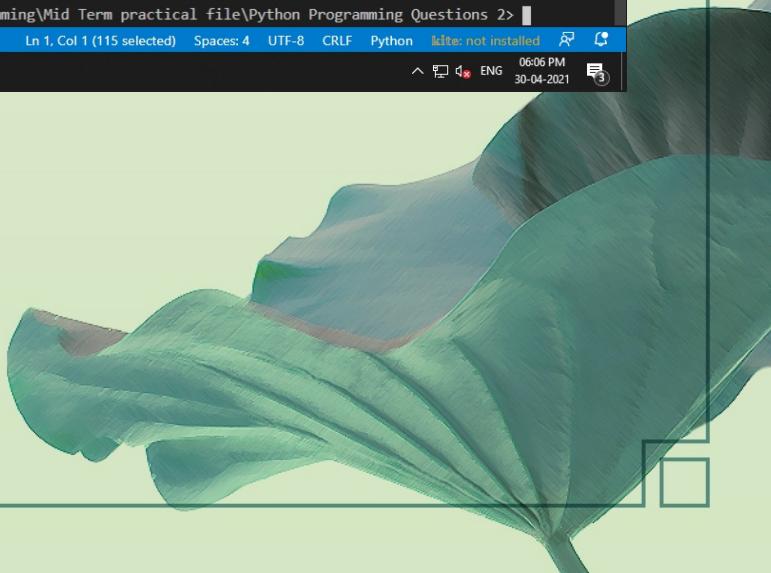
print('Table of 10 :')
print(f'10*{1}={10*1}')
print(f'10*{2}={10*2}')
print(f'10*{3}={10*3}')
print(f'10*{4}={10*4}')
print(f'10*{5}={10*5}')
print(f'10*{6}={10*6}')
print(f'10*{7}={10*7}')
print(f'10*{8}={10*8}')
print(f'10*{9}={10*9}')
print(f'10*{10}={10*10}'
```



# Python Programming Questions 2

1. Write a python program to print to print "hello students how are you" as "how are you hello students " five times without using print statement 5 times.

```
str = 'Hello students how are you \n '
str1 = str.replace(str, '''how are you Hello students\n''')
print(5*str1)
```



A screenshot of Visual Studio Code showing a Python script named `pr_01.py`. The code uses the `replace` method to transform the string "Hello students how are you" into "how are you Hello students", and then prints this modified string five times. The terminal window shows the output of the program, which is five lines of "how are you Hello students".

```
File Edit Selection View Go Run Terminal Help pr_01.py - Python Programming Questions 2 - Visual Studio Code
EXPLORER OPEN EDITORS Welcome pr_01.py 01_stringFunctions.ipynb
PYT... .vscode 01_stringFunctions.ip...
pr_01.py
pr_02.py
pr_03.py
pr_04.py
pr_05.py

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
1: Python
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 2 & C:/Users/ts/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 2/pr_01.py"
how are you Hello students
```

2. Assume any string which contains 'second semester', replace it with 'third semester'. Also print the position of third semester.

```
str = 'I am in second semester'  
  
str = str.replace('second', 'third')  
  
print(str)  
  
# pos1=str.index('third')# returns value error -----> if index not found  
# print('position is', pos1)  
pos2=str.find('third')# doesn't return value error -----> if index not found  
print('position is', pos2)
```



A screenshot of Visual Studio Code showing the Python code execution process. The code in the editor is:

```
str = 'I am in second semester'  
str = str.replace('second', 'third')  
print(str)  
  
# pos1=str.index('third')# returns value error -----> if index not found  
# print('position is', pos1)  
pos2=str.find('third')# doesn't return value error -----> if index not found  
print('position is', pos2)
```

The terminal output shows:

```
Copyright (C) Microsoft Corporation. All rights reserved.  
Try the new cross-platform PowerShell https://aka.ms/pscore6  
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 2> & C:/Users/ts/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 2/pr_02.py"  
I am in third semester  
position is 8  
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 2>
```

The status bar at the bottom indicates Python 3.9.2 64-bit, Live Share, and other system details.

3. Take any string which contains more than two lines about you. Now count number of times 'i' occurs in the string.

```
str = '''Hello !!! My name is Deepankar Sharma.  
I am pursuing BCA as of now from Graphic Era Hill University .  
It is really cool..'''  
cnt = str.count('i')  
print(f'i occurs {cnt} times')
```

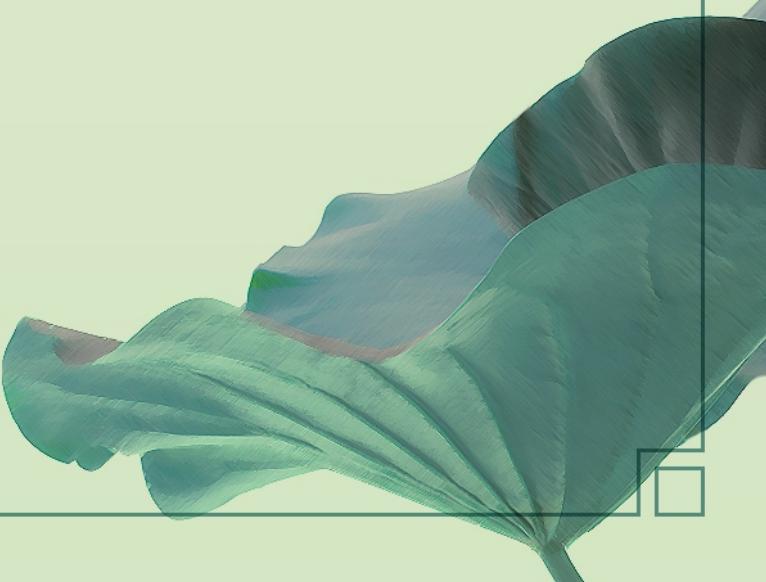


A screenshot of Visual Studio Code showing a Python script named pr\_03.py. The code prints a multi-line string and counts the occurrences of the letter 'i'. The terminal window shows the output: 'i occurs 7 times'. The status bar at the bottom indicates Python 3.9.2 64-bit and the current date and time.

```
File Edit Selection View Go Run Terminal Help pr_03.py - Python Programming Questions 2 - Visual Studio Code  
EXPLORER ... Welcome pr_01.py pr_02.py pr_03.py 01_stringFunction...  
pr_03.py > ...  
1 str = '''Hello !!! My name is Deepankar Sharma.  
2 | I am persuing BCA as of now from Graphic Era Hill University .  
3 | It is really cool..'''  
4 cnt = str.count('i')  
5 print(f'i occurs {cnt} times')  
  
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE 1: Python  
Windows PowerShell  
Copyright (C) Microsoft Corporation. All rights reserved.  
Try the new cross-platform PowerShell https://aka.ms/pscore6  
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 2> & C:/Users/tis/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 2/pr_03.py"  
i occurs 7 times  
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 2>  
  
Python 3.9.2 64-bit 0 0 Live Share Ln 4, Col 20 Spaces: 4 UTF-8 CRLF Python Kite: not installed 06:18 PM 30-04-2021 ENG
```

#### 4. Consider any long string . Now replace the space between two words with the tab.

```
str = ''Hello !!! My name is Deepankar Sharma.''  
str = str.split()  
print(' '.join(str))
```



A screenshot of Microsoft Visual Studio Code showing a Python script named pr\_04.py. The code uses the split() method to break the string into a list of words, and then the join() method with a single space character to reassemble the words into a single string where each word is separated by a tab. The terminal window shows the output of the script, which prints "Hello !!! My name is Deepankar Sharma." with tabs between the words.

```
File Edit Selection View Go Run Terminal Help pr_04.py - Python Programming Questions 2 - Visual Studio Code  
EXPLORER OPEN EDITORS Welcome pr_01.py pr_02.py pr_03.py pr_04.py 01_stringFunction...  
pr_04.py > ...  
1 str = ''Hello !!! My name is Deepankar Sharma.'  
2 str = str.split()  
3 print(' '.join(str))  
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE 1: Python  
Windows PowerShell  
Copyright (C) Microsoft Corporation. All rights reserved.  
Try the new cross-platform PowerShell https://aka.ms/pscore6  
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 2> & C:/Users/ts/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 2/pr_04.py"  
Hello !!! My name is Deepankar Sharma.  
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 2>  
Ln 3, Col 21 Spaces: 4 UTF-8 CRLF Python Idle: not installed 06:21 PM 30-04-2021
```

## 5. Write a python program which can identify and print output whether a given string is a website name or not.

```
str = input('Enter a website : ')
if '.com' in str:
    print('It is a website')
elif '.in' in str:
    print('It is a website')
else:
    print('It is not a website')
```



A screenshot of the Visual Studio Code (VS Code) interface showing a Python script named `pr_05.py`. The code checks if an input string contains either '.com' or '.in' to determine if it's a website. The terminal window shows the script running and printing 'It is a website' for the input 'gehu.com'. The status bar at the bottom indicates Python 3.9.2 is active.

```
File Edit Selection View Go Run Terminal Help pr_05.py - Python Programming Questions 2 - Visual Studio Code
```

EXPLORER OPEN EDITORS PYT... OUTLINE

```
pr_05.py > ...
1 str = input('Enter a website : ')
2 if '.com' in str:
3     print('It is a website')
4 elif '.in' in str:
5     print('It is a website')
6 else:
7     print('It is not a website')
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

Windows PowerShell  
Copyright (C) Microsoft Corporation. All rights reserved.  
Try the new cross-platform PowerShell https://aka.ms/pscore6

PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 2> & C:/User/s/t/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 2/pr\_05.py"  
Enter a website : gehu.com  
It is a website

PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 2>

Python 3.9.2 64-bit Live Share

Ln 5, Col 29 Spaces: 4 UTF-8 CRLF Python llite: not installed 06:24 PM 30-04-2021 ENG

# Python Programming Questions 3

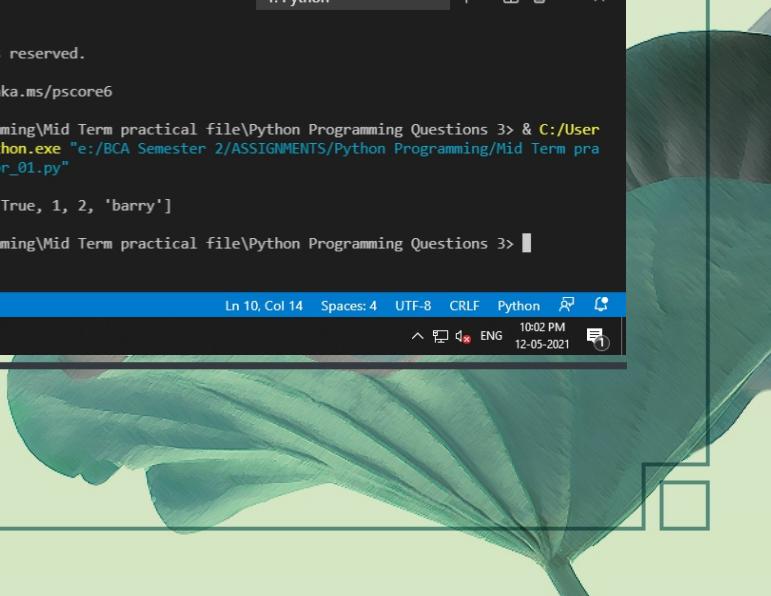
1. Take any list and print it in following manner.
  - a) Print only last three elements.
  - b) Print all values except the first and last value.
  - c) Print only first three elements.

```
l1 = ['deepankar', 'ram', 'dean', 'sam', 'oliver', 'roy', 'mia', True, 1, 2 , 'barry',  
'felicity']
```

```
# (a) # last three elements  
print(l1[-3:])
```

```
# (b) # all elements except first and last  
print(l1[1:-1])
```

```
# (c) # first three elements  
print(l1[:3])
```



A screenshot of the Visual Studio Code interface showing Python code in an editor tab and its output in a terminal tab.

**Editor Tab:**

```
File Edit Selection View Go Run Terminal Help  
01_pr_01.py - Python Programming Questions 3 - Visual Studio Code  
EXPLORER OPEN EDITORS PYTHON PROGRAMMING ...  
Welcome 01_pr_01.py 02_pr_02.py 01_pr_01.py 02_pr_02.py  
1 l1 = ['deepankar', 'ram', 'dean', 'sam', 'oliver', 'roy', 'mia', True, 1, 2 , 'barry',  
2  
3 # (a) # last three elements  
4 print(l1[-3:])  
5  
6 # (b) # all elements except first and last  
7 print(l1[1:-1])  
8  
9 # (c) # first three elements  
10 print(l1[:3])
```

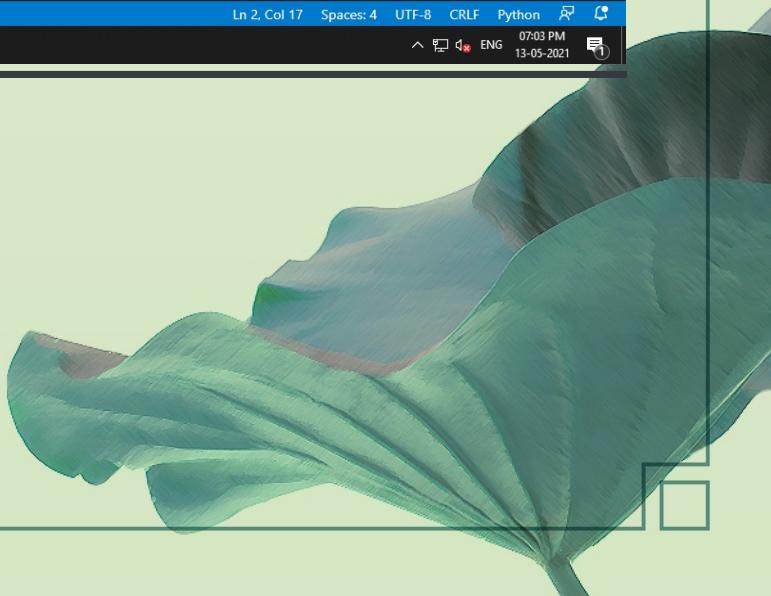
**Terminal Tab:**

```
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE  
Windows PowerShell  
Copyright (C) Microsoft Corporation. All rights reserved.  
Try the new cross-platform PowerShell https://aka.ms/pscore6  
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 3> & C:/User  
s/t/Python39/python.exe "E:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term pr  
actical file/Python Programming Questions 3/01_pr_01.py"  
[2, 'barry', 'felicity']  
['ram', 'dean', 'sam', 'oliver', 'roy', 'mia', True, 1, 2, 'barry']  
['deepankar', 'ram', 'dean']  
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 3>
```

Bottom status bar: Ln 10, Col 14 Spaces: 4 CRLF Python 10:02 PM 12-05-2021

2. In a python program, consider any list containing integer, decimal and string values . Now delete all decimal values using any list delete functions and then add three character values in it.

```
l1 = ['deepankar', 56.45, 'oliver', 'roy', 'mia', 1, 2 , 'barry', 'felicity', False]
l1.remove(56.45)
l1.append('A')
l1.insert(4,'g')
l1.insert(7,'0')
print(l1)
```



A screenshot of the Visual Studio Code (VS Code) interface showing a Python code editor. The code in the editor is:

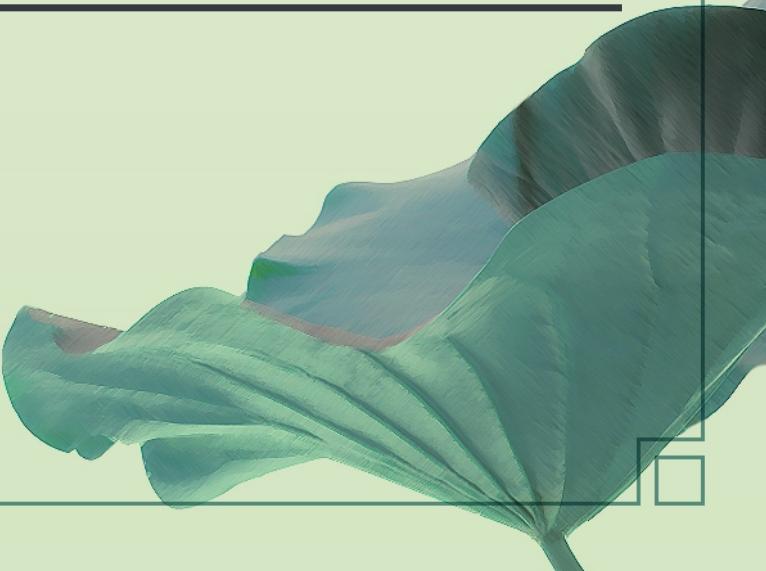
```
l1 = ['deepankar', 56.45, 'oliver', 'roy', 'mia', 1, 2 , 'barry', 'felicity', False]
l1.remove(56.45)
l1.append('A')
l1.insert(4,'g')
l1.insert(7,'0')
print(l1)
```

The terminal tab at the bottom shows the output of running the script:

```
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 3> & C:/Users/t5/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 3/02_pr_02.py"
['deepankar', 'oliver', 'roy', 'mia', 'g', 1, 2, '0', 'barry', 'felicity', False, 'A']
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 3>
```

3. Consider any tuple containing integer, decimal and string values . Now delete all decimal values and then add three character values in it.

```
t1 = ('deepankar', 56.45, 'oliver', 'roy', 'mia', 1, 2 , 'barry', 'felicity', False)
t1 = list(t1)
t1.remove(56.45)
t1.append('A')
t1.insert(4,'g')
t1.insert(7,'O')
t1 = tuple(t1)
print(t1)
```



A screenshot of Visual Studio Code showing the Python code execution process. The code in the editor is:

```
t1 = ('deepankar', 56.45, 'oliver', 'roy', 'mia', 1, 2 , 'barry', 'felicity', False)
t1 = list(t1)
t1.remove(56.45)
t1.append('A')
t1.insert(4,'g')
t1.insert(7,'O')
t1 = tuple(t1)
print(t1)
```

The terminal output shows the execution of the script:

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

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

PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 3> & C:/Users/ts/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 3/03_pr_03.py"
('deepankar', 'oliver', 'roy', 'mia', 'g', 1, 2 , 'O', 'barry', 'felicity', False, 'A')
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 3>
```

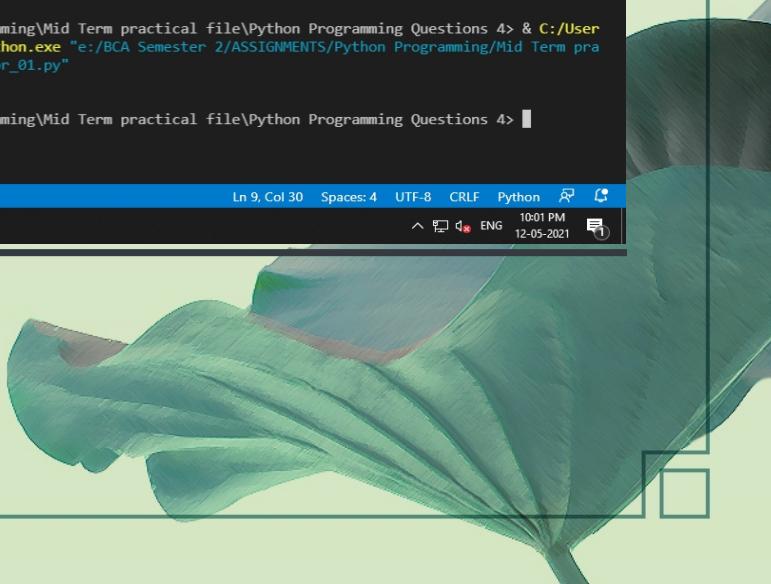
The status bar at the bottom indicates Python 3.9.2 64-bit, Live Share, and the current file path.

# Python Programming Questions 4

1. Make a dictionary in which the keys are the numbers and the values are their cubes. Now first print the dictionary and then print the values of the dictionary.

```
my_dict = { '1' : 1,
            '2' : 2**3,
            '3' : 3**3,
            '4' : 4**3,
            '5' : 5**3,
        }
print(my_dict)

print(list(my_dict.values()))
```



A screenshot of Visual Studio Code showing the Python code from the previous block. The code defines a dictionary with keys '1' through '5' and their cubes as values. It then prints the dictionary and a list of its values. The code is run in a Windows PowerShell terminal, and the output shows the dictionary and its values.

```
File Edit Selection View Go Run Terminal Help
01_pr_01.py - Python Programming Questions 4 - Visual Studio Code
EXPLORER ... 01_pr_01.py > ...
OPEN EDITORS Welcome 01_pr_01.py
02_pr_02.py
03_pr_03.py
PYTHO... 01_pr_01.py
02_pr_02.py
03_pr_03.py
pr_02.PNG
pr_03.PNG
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

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

PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 4> & C:/User
s/ts/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term pr
actical file/Python Programming Questions 4/01_pr_01.py"
{'1': 1, '2': 8, '3': 27, '4': 64, '5': 125}
[1, 8, 27, 64, 125]
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 4>

```

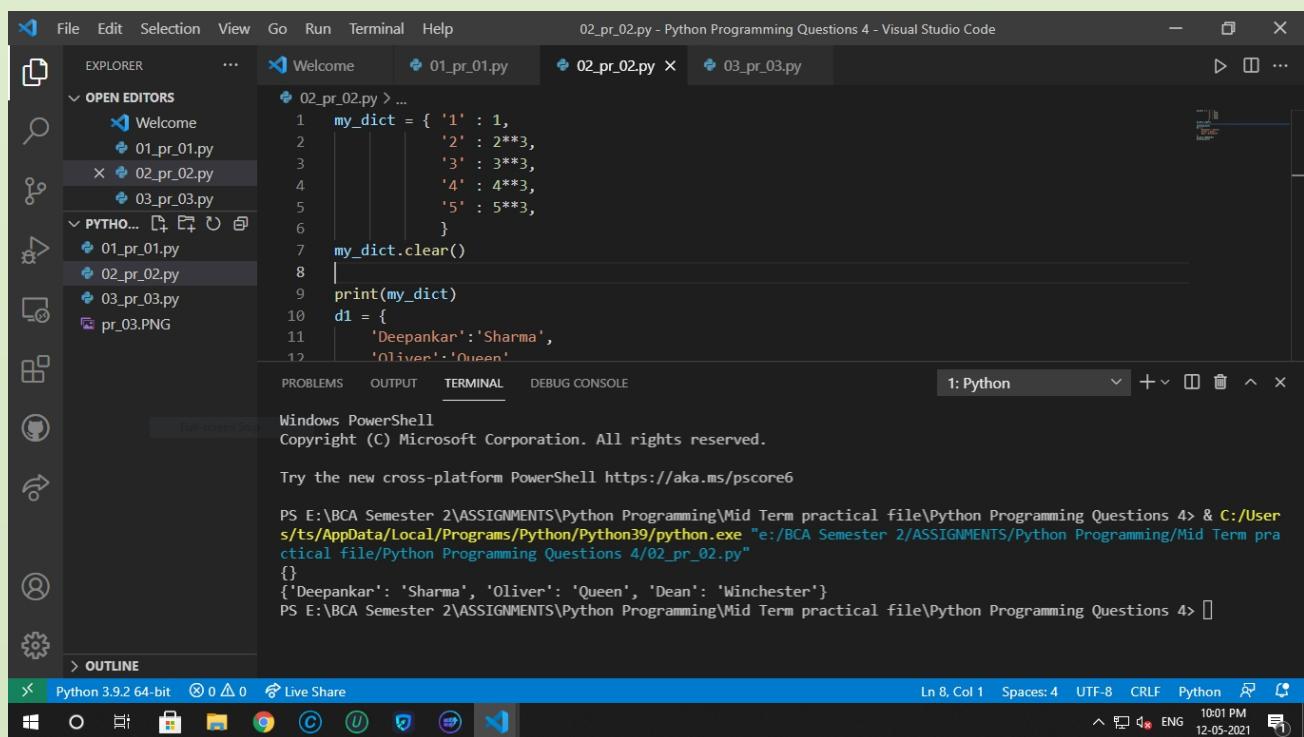
Python 3.9.2 64-bit Live Share

Ln 9, Col 30 Spaces: 4 UTF-8 CRLF Python 10:01 PM 12-05-2021

2. Consider an existing dictionary with some existing values. First empty the dictionary and then add some new key-value pairs to it.

```
my_dict = { '1' : 1,
            '2' : 2**3,
            '3' : 3**3,
            '4' : 4**3,
            '5' : 5**3,
        }
my_dict.clear()

print(my_dict)
d1 = {
    'Deepankar':'Sharma',
    'Oliver':'Queen',
    'Dean':'Winchester'
}
my_dict.update(d1)
print(my_dict)
```



A screenshot of the Visual Studio Code interface. The left sidebar shows the file tree with several Python files listed under 'OPEN EDITORS' and 'PYTHO...'. The main editor window displays the provided Python code. Below the editor, the terminal tab is active, showing a Windows PowerShell session. The command 'python 02\_pr\_02.py' is run, and the output is:

```
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 4> & C:/Users/tst/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 4/02_pr_02.py"
{}
{'Deepankar': 'Sharma', 'Oliver': 'Queen', 'Dean': 'Winchester'}
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 4>
```

The status bar at the bottom indicates the Python version is 3.9.2 64-bit, and the current file is 02\_pr\_02.py.

### 3. Write a python program to check any 5 values that is present in an existing dictionary or not.

```
my_dict = { '1' : 1,
             '2' : 2**3,
             '3' : 3**3,
             '4' : 4**3,
             '5' : 5**3,
             '6' : 6**3,
             '7' : 7**3,
             '8' : 8**3
         }

a = list(my_dict.values())
print(1 in a)
print(6 in a)
print(125 in a)
print(455 in a)
print(64 in a)
```

```
File Edit Selection View Go Run Terminal Help 03_pr_03.py - Python Programming Questions 4 - Visual Studio Code
EXPLORER OPEN EDITORS PYTHO... 01_pr_01.py 02_pr_02.py 03_pr_03.py
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

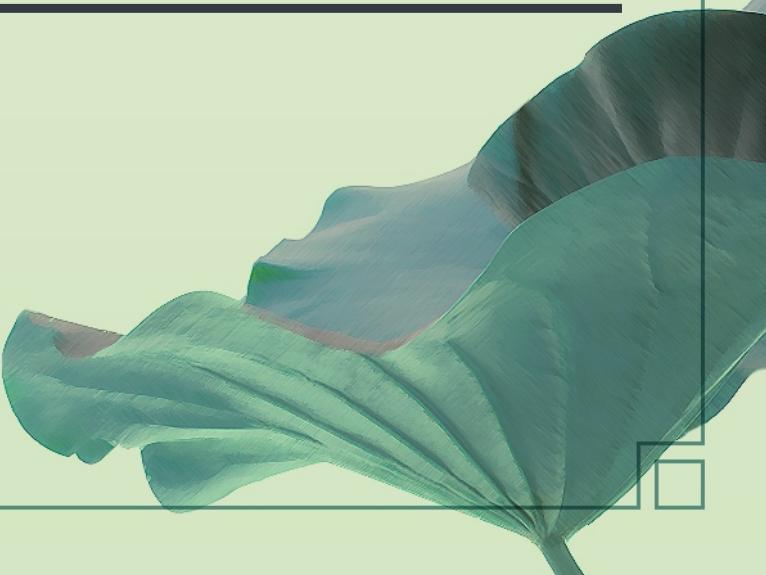
Try the new cross-platform PowerShell https://aka.ms/pscore6

PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 4> & C:/Users/sts/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 4/03_pr_03.py"
True
False
True
False
True
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 4>
```

# Python Programming Questions 5

1. Write a python program to check if the value entered by the user is a palindrome or not.

```
pal = input('Enter the value:   ')
if(pal==pal[::-1]):
    print("The value is a palindrome")
else:
    print("Not a palindrome")
```

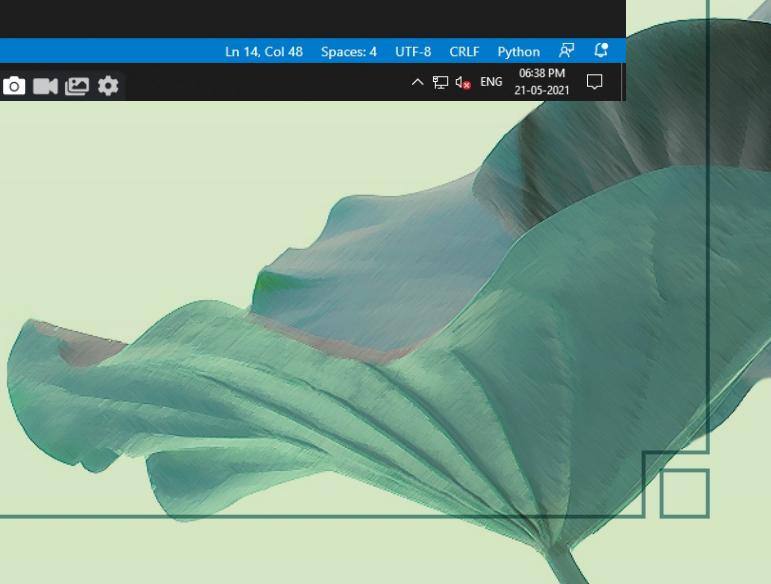


A screenshot of Visual Studio Code showing the Python code for checking palindromes. The code is identical to the one above. The interface includes the Explorer sidebar with multiple Python files listed, the Editor tab showing the code, the Terminal tab displaying the command-line output, and the status bar at the bottom showing file paths and system information.

## 2. Write a python program to check if the value entered by the user is a Armstrong number or not.

```
num = int(input('Enter the number: '))

temp = num
sum = 0
while(temp>0):
    r = temp%10
    sum+=(r*r*r)
    temp//=10
if(num==sum):
    print('The number is a armstrong number')
else:
    print('The number is not a armstrong number')
```



A screenshot of Visual Studio Code showing the Python code for checking Armstrong numbers. The code is identical to the one above. The interface includes the Explorer sidebar with files like 01\_palindrome.py, 01.png, stringRevSlicing.py, 03\_factorial.py, 02.png, 04\_fibonacci.py, and 05\_perfectNumber.py. The terminal shows the execution of the program, entering '153' and receiving the output 'The number is a armstrong number'. The status bar at the bottom indicates Python 3.9.2 64-bit, Live Share, and system details.

### 3. Consider a number given input by the user. Now find the factorial of the number.

```
def fact(num):
    if(num==0 or num==1):
        return 1
    return num*fact(num-1)
num = int(input('Enter the number: '))
print('The factorial of the number is ', fact(num))
```



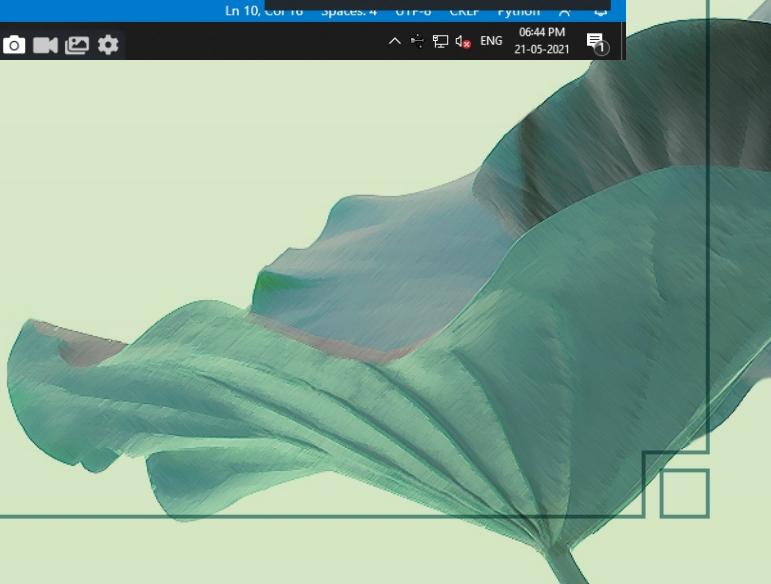
A screenshot of the Visual Studio Code (VS Code) interface showing the code for calculating factorial. The code is in the '03\_factorial.py' file, which is currently open in the editor. The terminal below shows the execution of the script and its output. The status bar at the bottom indicates Python 3.9.2 64-bit, and the date and time as 21-05-2021 06:41 PM.

```
File Edit Selection View Go Run Terminal Help 03_factorial.py - Python Programming Questions 5 - Visual Studio Code
EXPLORER ... 01_palindrome.py 01.png stringRevSlicing.py 02_armstrongNumber.py 03_factorial.py ...
OPEN EDITORS Welcome 01_palindrome.py 01.png stringRevSlicing... 02_armstrongNu... 03_factorial.py 02.png 04_fibonacci.py 05_perfectNumb...
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE 1: Python ...
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 5> & C:/User
s/t/ts/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term pr
actical file/Python Programming Questions 5/03_factorial.py"
Enter the number: 5
The factorial of the number is 120
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 5>
Ln 7, Col 1 Spaces: 4 UTF-8 CRLF Python Live Share 06:41 PM 21-05-2021
```

#### 4. Write a python program to print the fibonacci sequence upto the range given by the user.

```
num = int(input('Enter the range for the series: '))
f1, f2 = 0, 1

for i in range(1,num+1):
    if i==1:
        print(f1)
    else:
        fn = f1+f2
        print(fn)
        f1 = f2
        f2 = fn
```



A screenshot of Visual Studio Code showing the Python Fibonacci sequence program. The code is in the main editor tab, and the terminal shows the output of running the script. A Windows taskbar is at the bottom.

**File Edit Selection View Go Run Terminal Help**      04\_fibonacci.py - Python Programming Questions 5 - Visual Studio Code

**EXPLORER**    ...

**OPEN EDITORS**

- Welcome
- 01.palindrome.py
- 01.png
- stringRevSlicing....
- 02\_armstrongNu...
- 03\_factorial.py
- 02.png
- 04\_fibonacci.py**
- 05\_perfectNumb...

**PYTHON PROGRAMMING ...**

- 01.palindrome.py
- 01.png
- 02\_armstrongNumber...
- 02.png
- 03\_factorial.py
- 04\_fibonacci.py**
- 05\_perfectNumber.py
- stringRevSlicing.py

**PROBLEMS**    **OUTPUT**    **TERMINAL**    **DEBUG CONSOLE**

1: Python

PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 5> & C:/Users/tst/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 5/04\_fibonacci.py"

Enter the range for the series: 8

0  
1  
2  
3  
5  
8  
13  
21

USB device not recognized

The last USB device you connected to this computer malfunctioned, and Windows does not recognize it.

Windows Explorer

Python 3.9.2 64-bit    Live Share

Ln 10, Col 10    Spaces: 4    GTF-0    CKP Python

06:44 PM    21-05-2021

## 5. Write a python program to check whether the number entered by the user is a perfect number or not.

```
num = int(input('Enter the number: '))
sum = 0
for i in range(1,int(num/2)+1):
    if (num%i==0):
        sum+=i

if(num==sum):
    print('The number is perfect number.')
else:
    print('The number is not a perfect number.'
```



A screenshot of Visual Studio Code showing the Python code for checking perfect numbers. The code is identical to the one above. The interface includes the Explorer sidebar with files like 'Welcome', '01\_palindrome.py', etc., and the Terminal tab showing the execution of the script. A tooltip in the bottom right corner indicates a 'USB device not recognized' message.

```
File Edit Selection View Go Run Terminal Help 05_perfectNumber.py - Python Programming Questions 5 - Visual Studio Code
```

```
EXPLORER OPEN EDITORS PYTHON PROGRAMMING ...
```

```
05_perfectNumber.py > ...
1 num = int(input('Enter the number: '))
2 sum = 0
3 for i in range(1,int(num/2)+1):
4     if (num%i==0):
5         sum+=i
6
7 if(num==sum):
8     print('The number is perfect number.')
9 else:
10    print('The number is not a perfect number.'
```

```
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE 1: Python
```

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

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

PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 5 & C:/Users/sts/AppData/Local/Programs/Python/Python39/python.exe "E:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 5/05_perfectNumber.py"
Enter the number: 33550336
The number is perfect number.
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Py
```

USB device not recognized  
The last USB device you connected to this computer malfunctioned, and Windows does not recognize it.  
Windows Explorer

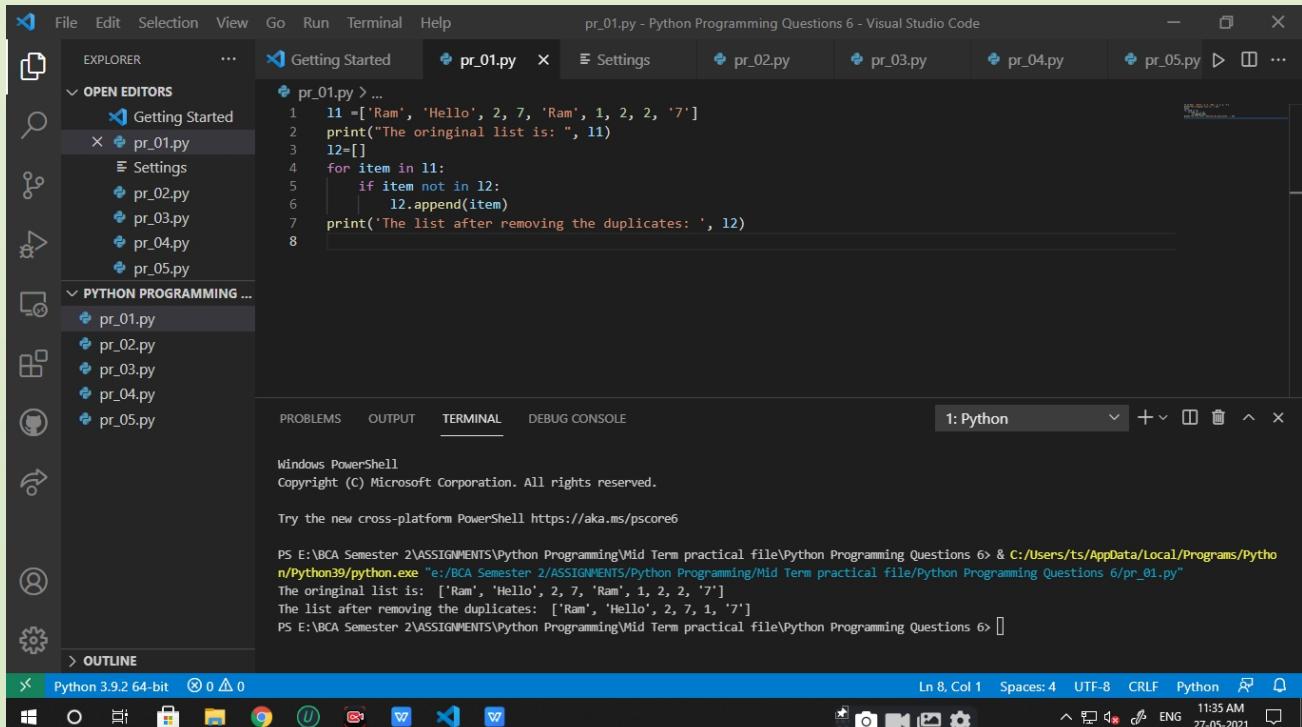
```
Python 3.9.2 64-bit ① 0 △ 0 Live Share
```

```
Windows Taskbar: File Explorer, Edge, Google Chrome, Task View, Taskbar settings, Taskbar icons, Taskbar status bar: In 10, Cor 49, Spaces. 4, CPU 0, GPU 0, Python, 06:51 PM, 21-05-2021, ENG
```

# Python Programming Questions 6

1. Write a python program to remove duplicate values from a list.

```
l1 =['Ram', 'Hello', 2, 7, 'Ram', 1, 2, 2, '7']
print("The oringinal list is: ", l1)
l2=[]
for item in l1:
    if item not in l2:
        l2.append(item)
print('The list after removing the duplicates: ', l2)
```



The screenshot shows the Visual Studio Code interface with the following details:

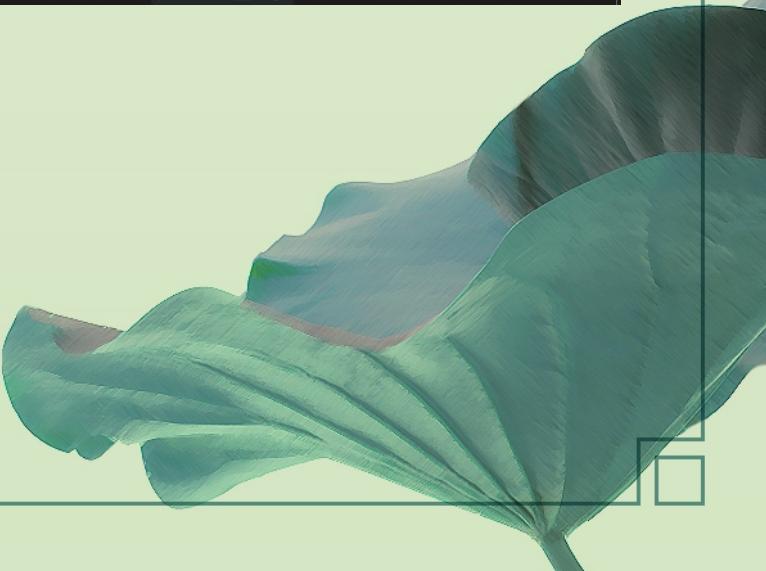
- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Explorer:** Shows files in the workspace, including `pr_01.py` which is currently selected.
- Terminal:** Shows the command line output of the Python script.

```
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 6 & C:/Users/ts/AppData/Local/Programs/Python 3.9/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 6/pr_01.py"
The oringinal list is: ['Ram', 'Hello', 2, 7, 'Ram', 1, 2, 2, '7']
The list after removing the duplicates: ['Ram', 'Hello', 2, 7, 1, '7']
```
- Status Bar:** Shows the Python version (3.9.2 64-bit), line and column numbers (Ln 8, Col 1), and other system information.

2. Write a python program to get a string from the user and check if it starts with "is" or not. If not then add is with it.

```
str = input('Enter a string : ')
if str.startswith('is'):
    print('The string starts with "is"')
else:
    print('It does not start with "is"')
    str=(str+'is')

print(str)
```



A screenshot of Visual Studio Code showing a Python script named `pr_02.py`. The code checks if a string entered by the user starts with "is". If it does, it prints a message; if not, it adds "is" to the string and then prints it. The terminal below shows the script running and outputting the expected results for different inputs.

```
File Edit Selection View Go Run Terminal Help pr_02.py - Python Programming Questions 6 - Visual Studio Code
EXPLORER OPEN EDITORS Getting Started pr_02.py ...
PYTHON PROGRAMMING ... pr_01.py pr_02.py pr_03.py pr_04.py pr_05.py
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

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

PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 6 & C:/Users/ts/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 6/pr_02.py"
Enter a string : tristus
It does not start with "is"
tristusis
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 6>
```

Python 3.9.2 64-bit 0 0 0

Ln 8, Col 11 Spaces: 4 UTF-8 CRLF Python 11:40 AM 27-05-2021

### 3. Write a python program to count the number of alphabets, digits and symbols in the string given by the user.

```
alpha=0
lett=0
symb=0
str = input('Enter some string: ')
for i in str:
    if i.isalpha():
        alpha+=1
    elif i.isdigit():
        lett+=1
    else:
        symb+=1
print('Number of alphabets in the string is ', alpha)
print('Number of digits in the string is ', lett)
print('Number of symbols in the string is ', symb)
```



A screenshot of Visual Studio Code showing the Python file pr\_03.py open. The code counts the number of alphabets, digits, and symbols in a user-entered string. The terminal below shows the execution of the script and its output. The taskbar at the bottom indicates the system is running Windows 10, version 3.9.2 64-bit.

```
File Edit Selection View Go Run Terminal Help pr_03.py - Python Programming Questions 6 - Visual Studio Code
```

```
EXPLORER OPEN EDITORS Getting Started pr_02.py pr_03.py > ...
```

```
PYTHON PROGRAMMING ... pr_01.py pr_02.py pr_03.py pr_04.py pr_05.py
```

```
pr_03.py > ...
1 alpha=0
2 lett=0
3 symb=0
4 str = input('Enter some string: ')
5 for i in str:
6     if i.isalpha():
7         alpha+=1
8     elif i.isdigit():
9         lett+=1
10    else:
11        symb+=1
12 print('Number of alphabets in the string is ', alpha)
13 print('Number of digits in the string is ', lett)
14 print('Number of symbols in the string is ', symb)
```

```
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE 1: Python
```

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

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

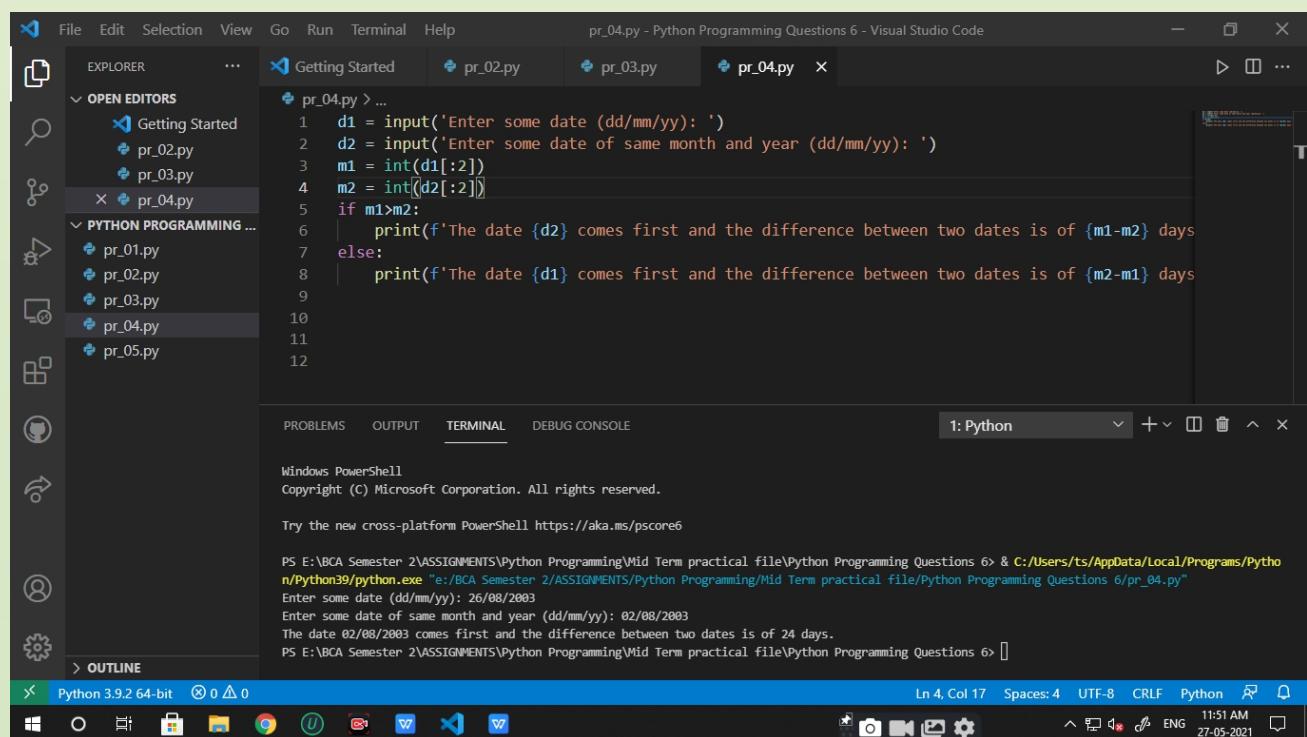
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 6> & C:/Users/ts/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2\ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 6/pr_03.py"
Enter some string: I'm #gDE672f7
Number of alphabets in the string is 7
Number of digits in the string is 4
Number of symbols in the string is 3
```

```
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 6> 
```

```
Python 3.9.2 64-bit ① 0 △ 0 Ln 15, Col 1 Spaces: 4 UTF-8 CRLF Python ⚙ 11:42 AM ENG 27-05-2021
```

4. Take two dates of same month and same year from the user in the format dd/mm/yy. Now compare only the dates and calculate the number of days between the two dates and also print which date comes first.

```
d1 = input('Enter some date (dd/mm/yy): ')
d2 = input('Enter some date of same month and year (dd/mm/yy): ')
m1 = int(d1[:2])
m2 = int(d2[:2])
if m1>m2:
    print(f'The date {d2} comes first and the difference between two dates is of {m1-m2} days.')
else:
    print(f'The date {d1} comes first and the difference between two dates is of {m2-m1} days.')
```



The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows files in the 'OPEN EDITORS' section: 'Getting Started', 'pr\_02.py', 'pr\_03.py', and 'pr\_04.py' (the active file). It also lists 'pr\_01.py', 'pr\_02.py', 'pr\_03.py', 'pr\_04.py', and 'pr\_05.py' under 'PYTHON PROGRAMMING ...'.
- Code Editor:** Displays the Python code for comparing dates.
- Terminal:** Shows the command-line output of running the script 'pr\_04.py'. The terminal window title is '1: Python'. The output shows the script being run, user inputs for dates, and the resulting comparison message.
- Bottom Status Bar:** Shows system information like 'Python 3.9.2 64-bit', 'Ln 4, Col 17', 'Spaces: 4', 'CRLF', 'Python', and the current date and time '27-05-2021 11:51 AM'.

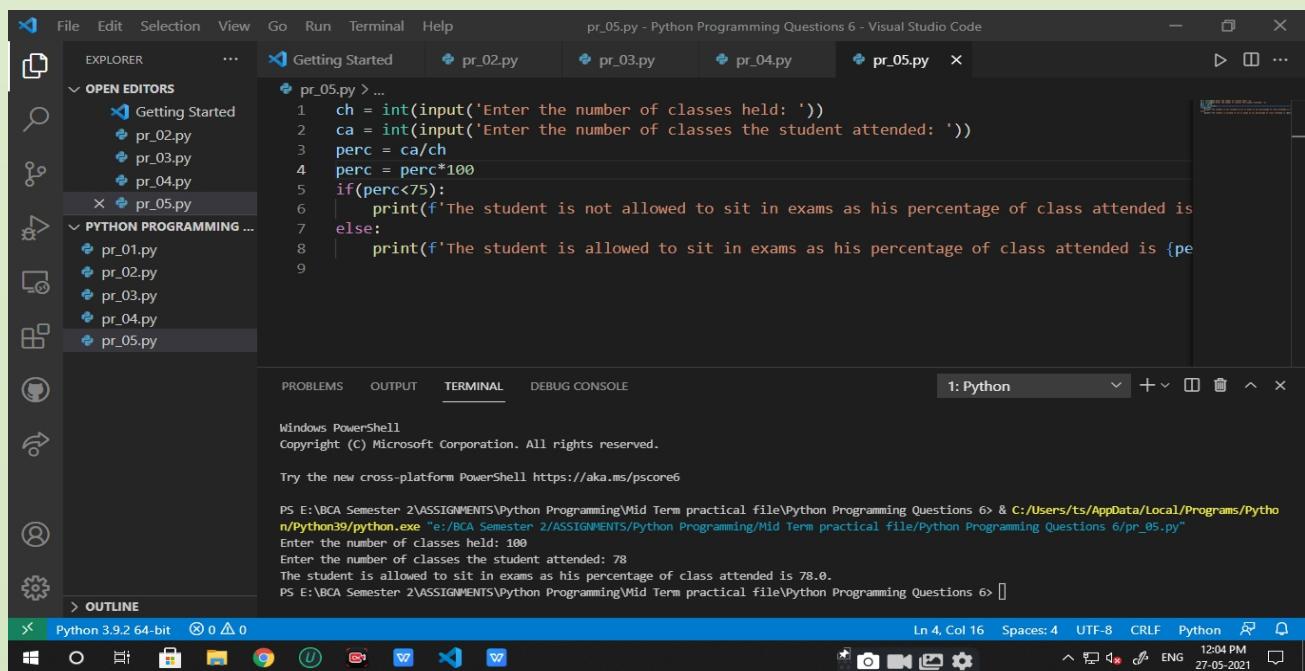
5. A student is not allowed to sit in exams ,if his/her attendance is less than 75%. Take following inputs from the user:

->number of classes held.

->number of classes attended.

Print the percentage of class attended and also tell if he/she will sit in the exams.

```
ch = int(input('Enter the number of classes held: '))
ca = int(input('Enter the number of classes the student attended: '))
perc = ca/ch
perc = perc*100
if(perc<75):
    print(f'The student is not allowed to sit in exams as his percentage of classes attended is {perc}.')
else:
    print(f'The student is allowed to sit in exams as his percentage of class attended is {perc}.')
```



The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows files in the current workspace, including "pr\_05.py" which is the active file.
- Terminal:** Displays the command-line output of the Python script.

```
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 6 & C:/Users/ts/AppData/Local/Programs/Python/Python39/python.exe "e:/BCA Semester 2/ASSIGNMENTS/Python Programming/Mid Term practical file/Python Programming Questions 6/pr_05.py"
Enter the number of classes held: 100
Enter the number of classes the student attended: 78
The student is allowed to sit in exams as his percentage of class attended is 78.0.
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 6>
```
- Status Bar:** Shows the Python version (Python 3.9.2 64-bit), file encoding (UTF-8), and system information (Windows 10, ENG, 27-05-2021).

# Python Programming Questions 7

1. Write a python program having a user defined function which will calculate the total number of vowels in a string given by the user.

```
def vowels(str):
    count =0
    for i in str:
        if i=='a' or i=='e' or i=='i' or i=='o' or i=='u':
            count+=1
    return count

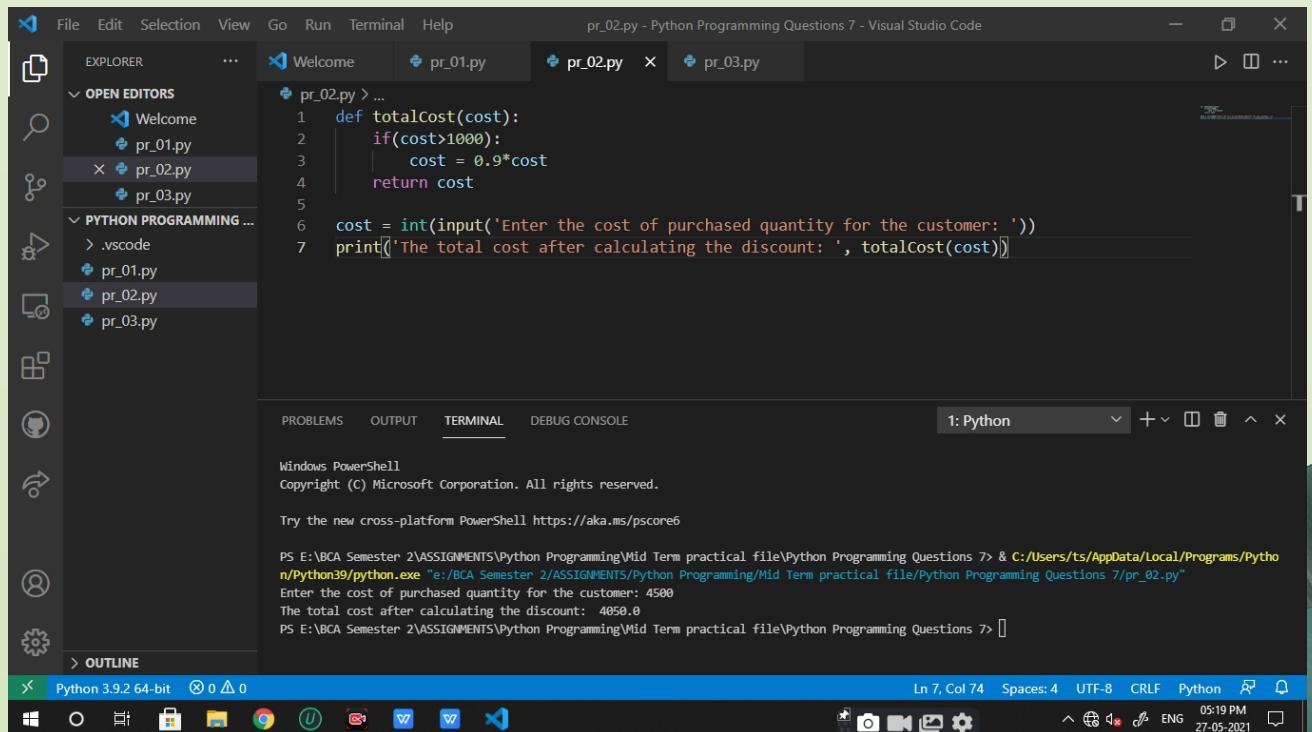
str = input('Enter some string: ')
print('Number of vowels in the string is ', vowels(str))
```

The screenshot shows the Visual Studio Code interface. The left sidebar displays the file structure with three Python files: pr\_01.py, pr\_02.py, and pr\_03.py. The main editor tab is titled 'pr\_01.py' and contains the provided Python code. Below the editor, the terminal window shows the output of running the script, including the Windows PowerShell prompt, the command 'python.exe', the user input 'Enter some string: My username is deepankar2003', the program's response 'Number of vowels in the string is 9', and the path 'E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 7>'. The status bar at the bottom indicates the code is in Python 3.9.2, has 10 lines and 4 spaces, and was last modified at 05:12 PM on 27-05-2021.

2. A shop will give discount of 10% if the cost of the purchased quantity is more than 1000 rupees. Now write a python on program having a user defined function which will first calculate whether the purchased quantity is more than 1000 rupees or not and then accordingly it will print the total cost for the user.

```
def totalCost(cost):
    if(cost>1000):
        cost = 0.9*cost
    return cost

cost = int(input('Enter the cost of purchased quantity for the customer: '))
print('The total cost after calculating the discount: ', totalCost(cost))
```



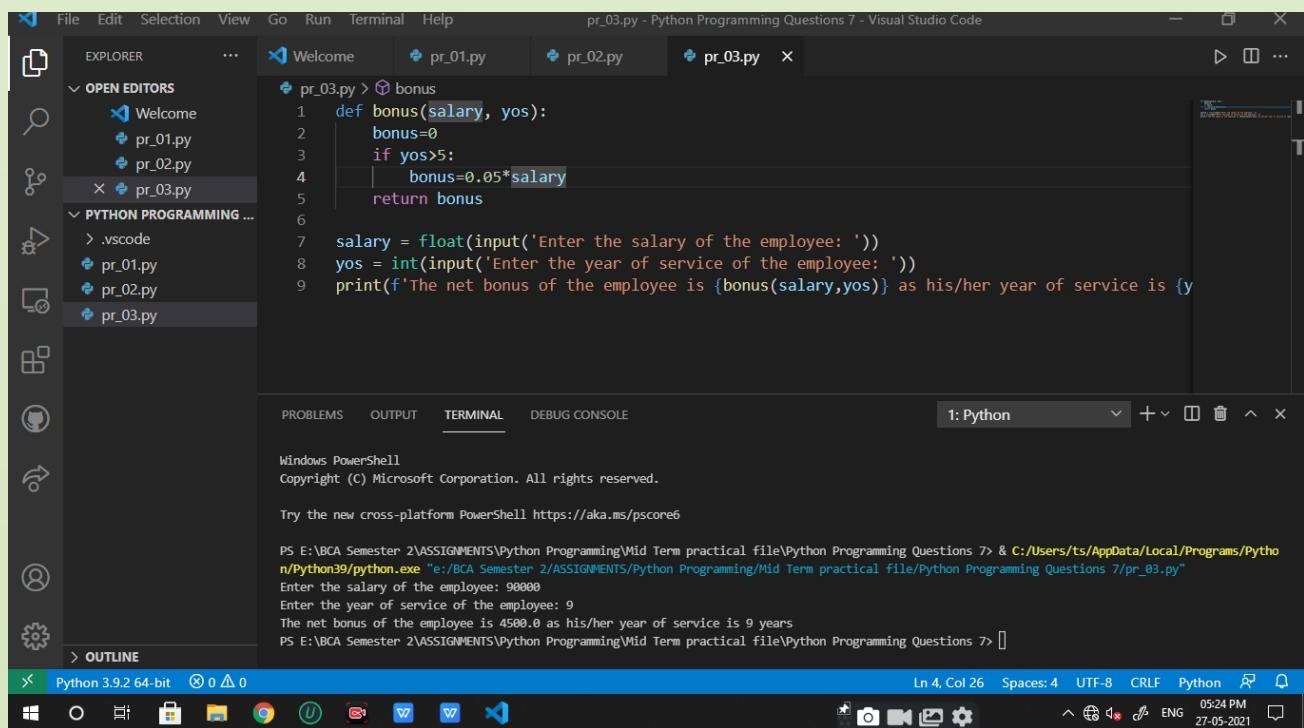
The screenshot shows a Visual Studio Code interface with the following details:

- File Explorer:** Shows files in the workspace, including `pr_01.py`, `pr_02.py` (the current file), and `pr_03.py`.
- Terminal:** Displays the command-line output of the Python code execution. It shows the code being run, the user input of "4500", and the resulting output "The total cost after calculating the discount: 4050.0".
- Status Bar:** Shows the Python version (Python 3.9.2 64-bit), file statistics (0 0 0), encoding (UTF-8), line (Ln 7, Col 74), and date/time (05:19 PM 27-05-2021).

3. Suppose a company decided to give a bonus of 5% to their employee if his/her year of service in the company is more than 5 years. Now write a python program having a user defined function which will print the net bonus amount. Ask user to input the salary and the year of service.

```
def bonus(salary, yos):
    bonus=0
    if yos>5:
        bonus=0.05*salary
    return bonus

salary = float(input('Enter the salary of the employee: '))
yos = int(input('Enter the year of service of the employee: '))
print(f'The net bonus of the employee is {bonus(salary,yos)} as his/her year of service is {yos} years')
```



The screenshot shows the Microsoft Visual Studio Code interface. The code editor displays the Python script `pr_03.py` with the following content:

```
def bonus(salary, yos):
    bonus=0
    if yos>5:
        bonus=0.05*salary
    return bonus

salary = float(input('Enter the salary of the employee: '))
yos = int(input('Enter the year of service of the employee: '))
print(f'The net bonus of the employee is {bonus(salary,yos)} as his/her year of service is {yos} years')
```

The terminal below the code editor shows the execution of the script:

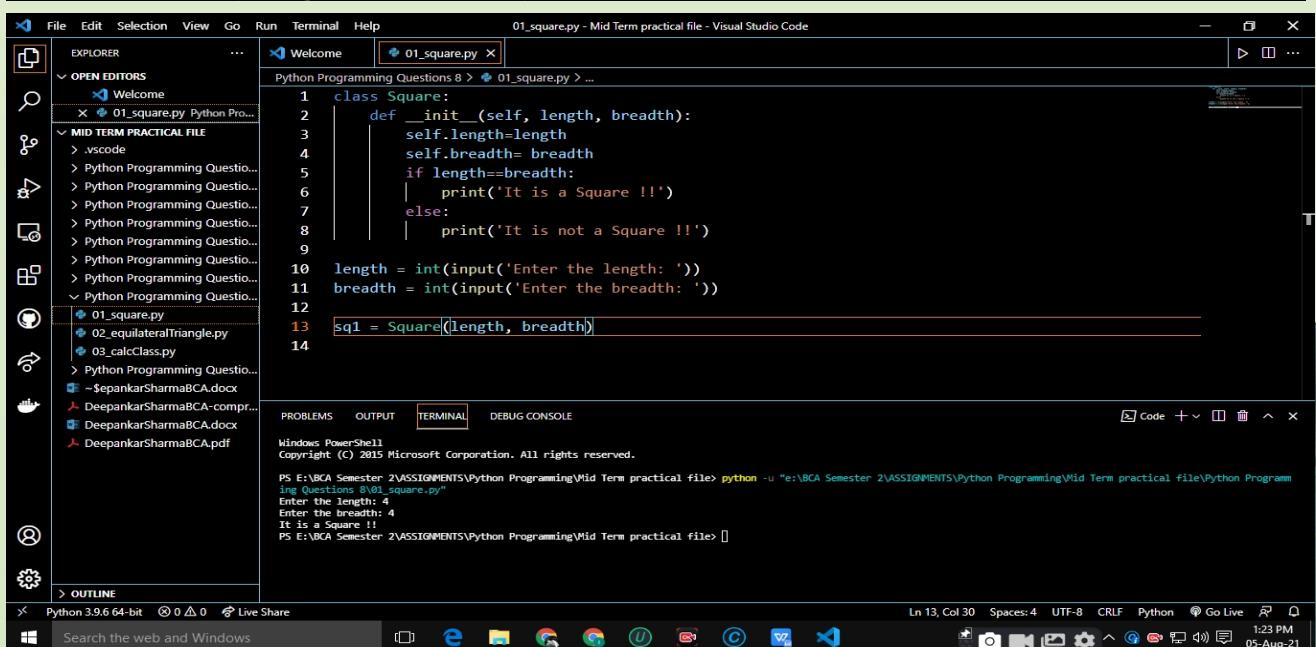
```
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 7 & C:/Users/ts/AppData/Local/Programs/Python/Python39/python.exe "E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 7\pr_03.py"
Enter the salary of the employee: 90000
Enter the year of service of the employee: 9
The net bonus of the employee is 4500.0 as his/her year of service is 9 years
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 7 >
```

The status bar at the bottom indicates the Python version (3.9.2 64-bit), file path (pr\_03.py), line and column (Ln 4, Col 26), and date and time (05-24 PM 27-05-2021).

# Python Programming Questions 8

1. Write a python class which takes values of length and breadth of a rectangle from the user and check if it is a square or not.

```
class Square:  
    def __init__(self, length, breadth):  
        self.length=length  
        self.breadth= breadth  
        if length==breadth:  
            print('It is a Square !!')  
        else:  
            print('It is not a Square !!')  
  
length = int(input('Enter the length: '))  
breadth = int(input('Enter the breadth: '))  
  
sq1 = Square(length, breadth)
```

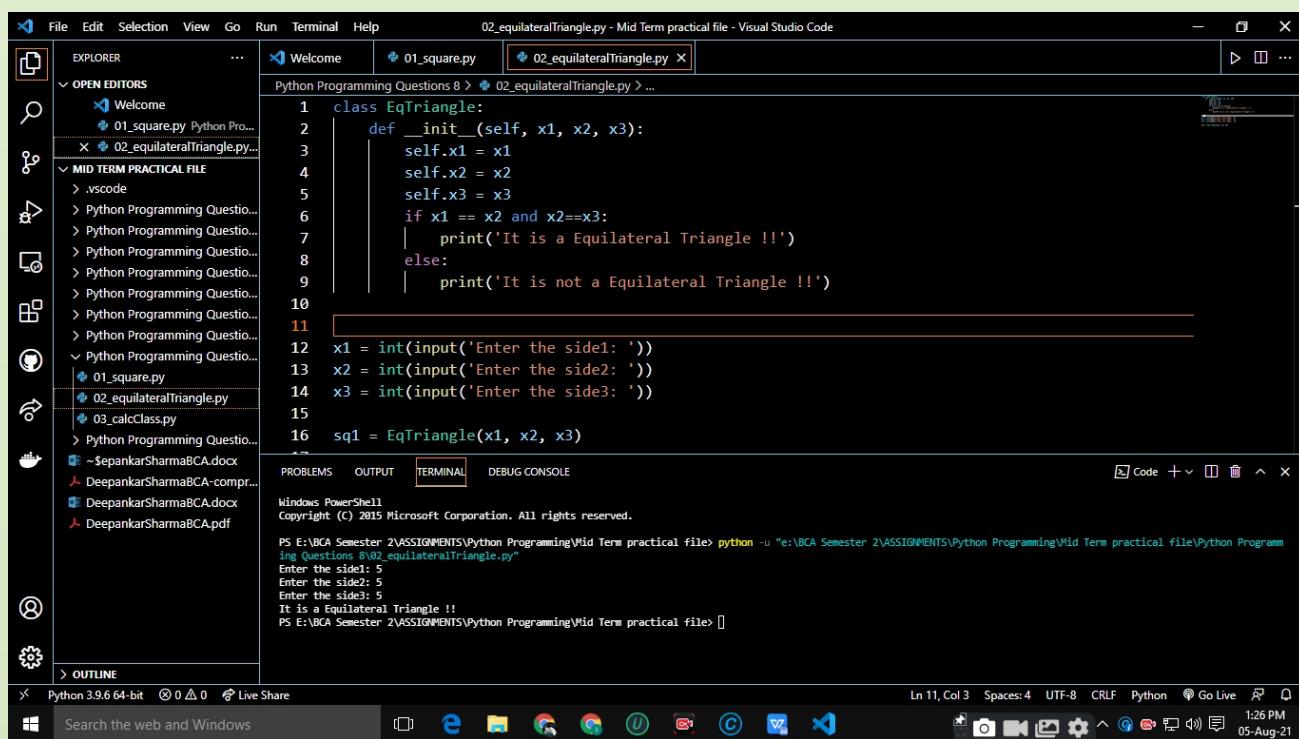


The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows files like 01\_square.py, 02\_equilateralTriangle.py, 03\_calcClass.py, and several DeepankarSharmaBCA-related files.
- Code Editor:** Displays the Python code for a Square class. It includes methods for initializing a rectangle and checking if it is a square based on equal length and breadth.
- Terminal:** Shows the command `python -u "e:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\01_square.py"` being run, followed by user input for length and breadth, and the output "It is a Square !!".
- Status Bar:** Shows the Python version (3.9.6), file path (Windows PowerShell), and other system information.

## 2. Write a python program which takes three sides of a triangle from the user and check if it is a equilateral triangle or not.

```
class EqTriangle:  
    def __init__(self, x1, x2, x3):  
        self.x1 = x1  
        self.x2 = x2  
        self.x3 = x3  
        if x1 == x2 and x2==x3:  
            print('It is a Equilateral Triangle !!')  
        else:  
            print('It is not a Equilateral Triangle !!')  
  
x1 = int(input('Enter the side1: '))  
x2 = int(input('Enter the side2: '))  
x3 = int(input('Enter the side3: '))  
  
sq1 = EqTriangle(x1, x2, x3)
```



The screenshot shows the Visual Studio Code interface with the following details:

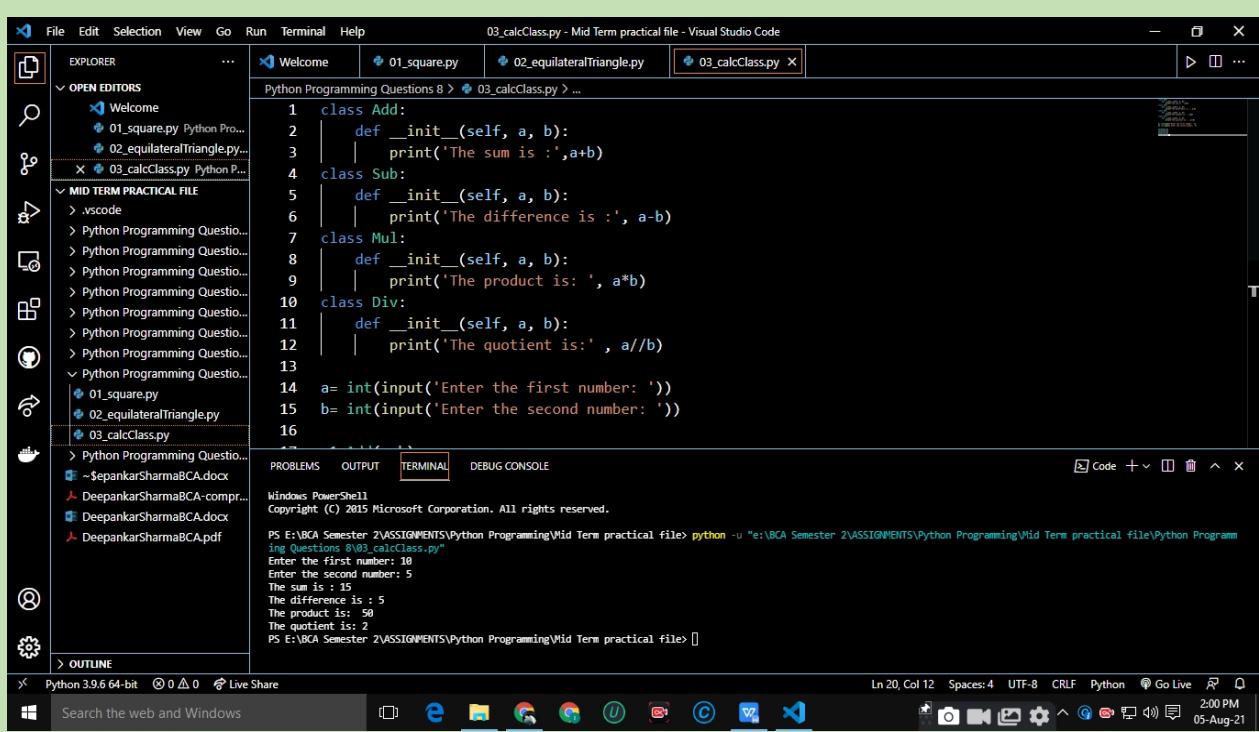
- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help
- Explorer:** Shows files like Welcome, 01\_square.py, 02\_equitlateralTriangle.py, .vscode, and several Python Programming Questions files.
- Code Editor:** Displays the Python code for checking if a triangle is equilateral. The code defines a class EqTriangle with an \_\_init\_\_ method that prints 'It is a Equilateral Triangle !!' if all three sides are equal, and 'It is not a Equilateral Triangle !!' otherwise. It then prompts the user for three sides and creates an instance of EqTriangle.
- Terminal:** Shows the command line output of running the script. The user enters three side lengths (5, 5, 5) and the terminal prints 'It is a Equilateral Triangle !!'.
- Status Bar:** Shows Python 3.9.6 64-bit, Live Share, and various system icons.

### 3. Write 4 python classes which can calculate Addition, Subtraction, Multiplication and Division. Take input from the user.

```
class Add:
    def __init__(self, a, b):
        print('The sum is :',a+b)
class Sub:
    def __init__(self, a, b):
        print('The difference is :', a-b)
class Mul:
    def __init__(self, a, b):
        print('The product is: ', a*b)
class Div:
    def __init__(self, a, b):
        print('The quotient is:' , a//b)

a= int(input('Enter the first number: '))
b= int(input('Enter the second number: '))

x1=Add(a,b)
x1=Sub(a,b)
x1=Mul(a,b)
x1=Div(a,b)
```



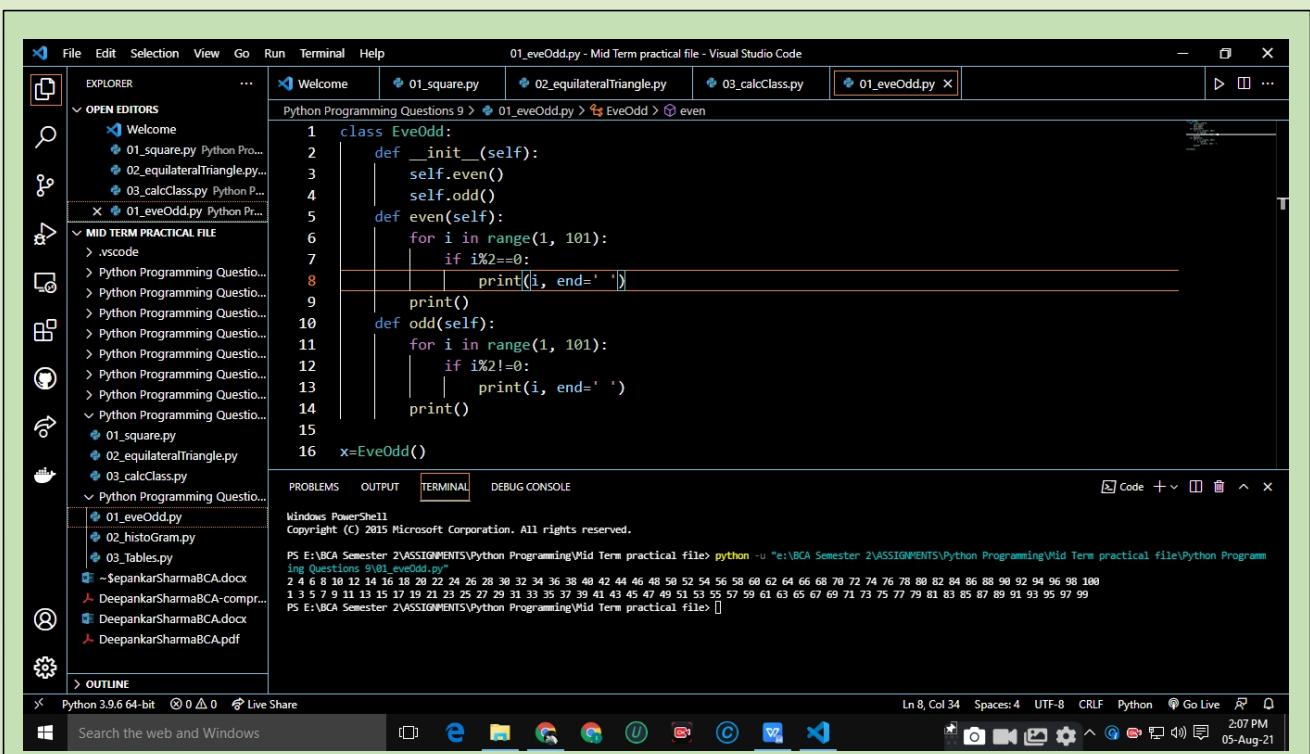
The screenshot shows the Visual Studio Code interface. The code editor window is open with the file '03\_calcClass.py' containing the provided Python code. Below the code editor is the terminal window, which displays the execution of the script and its output. The terminal output shows the user entering '5' and '10' as inputs, and the program printing the sum (15), difference (-5), product (50), and quotient (5).

```
File Edit Selection View Go Run Terminal Help 03_calcClass.py - Mid Term practical file - Visual Studio Code
EXPLORER OPEN EDITORS MID TERM PRACTICAL FILE OUTLINE
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Windows PowerShell Copyright (C) 2015 Microsoft Corporation. All rights reserved.
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file> python -u "e:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Programming Questions 8\03_calcClass.py"
Enter the first number: 10
Enter the second number: 5
The sum is : 15
The difference is : 5
The product is: 50
The quotient is: 2
PS E:\BCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file>
```

# Python Programming Questions 9

1. Create a Python class having two functions to print even and odd numbers between 1 and 100.

```
class EveOdd:  
    def __init__(self):  
        self.even()  
        self.odd()  
    def even(self):  
        for i in range(1, 101):  
            if i%2==0:  
                print(i, end=' ')  
            print()  
    def odd(self):  
        for i in range(1, 101):  
            if i%2!=0:  
                print(i, end=' ')  
            print()  
  
x=EveOdd()
```



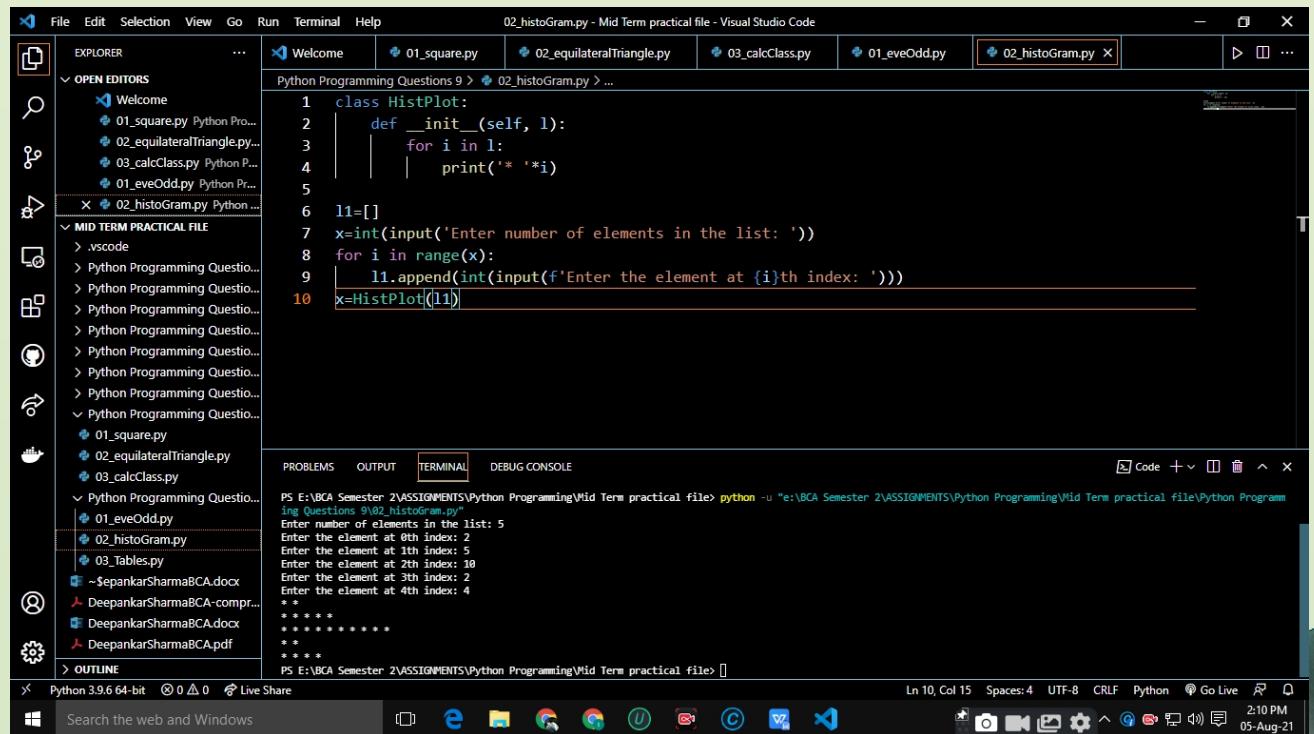
The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure with files like 01\_square.py, 02\_equilateralTriangle.py, 03\_calcClass.py, and 01\_eveOdd.py.
- Terminal:** Displays the command line output of running the code with Python 3.9.6. The output shows the even numbers from 1 to 100.
- Code Editor:** The code for the `EveOdd` class is displayed, with the `even` method highlighted.
- Status Bar:** Shows the Python version (3.9.6), memory usage (0.0 0), and other system information.

```
Windows PowerShell  
Copyright (C) 2015 Microsoft Corporation. All rights reserved.  
PS E:\VCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file> python -u "e:\VCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file\Python Program  
1.py"  
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99  
PS E:\VCA Semester 2\ASSIGNMENTS\Python Programming\Mid Term practical file> [
```

2. Write a Python program in which a class having function which will create a histogram of a given list of integers.

```
class HistPlot:  
    def __init__(self, l):  
        for i in l:  
            print('*' * i)  
  
l1=[]  
x=int(input('Enter number of elements in the list: '))  
for i in range(x):  
    l1.append(int(input(f'Enter the element at {i}th index: ')))  
x=HistPlot(l1)
```



3. Write a Python program that have a class having a function that will print tables upto 5 of values from 2 to 5.

```
class Tables:  
    def __init__(self):  
        self.pnTable()  
    def pnTable(self):  
        for i in range(2,6):  
            for j in range(1, 6):  
                print(f'{i}*{j} = {i*j}')  
            print()  
  
x=Tables()
```

