

# **NATIONAL UNIVERSITY OF MODERN LANGUAGES**



## **Artificial Intelligence**

### **Lab Exam**

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#### **Submitted To:**

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#### **Section:**

BSSE –VIII A

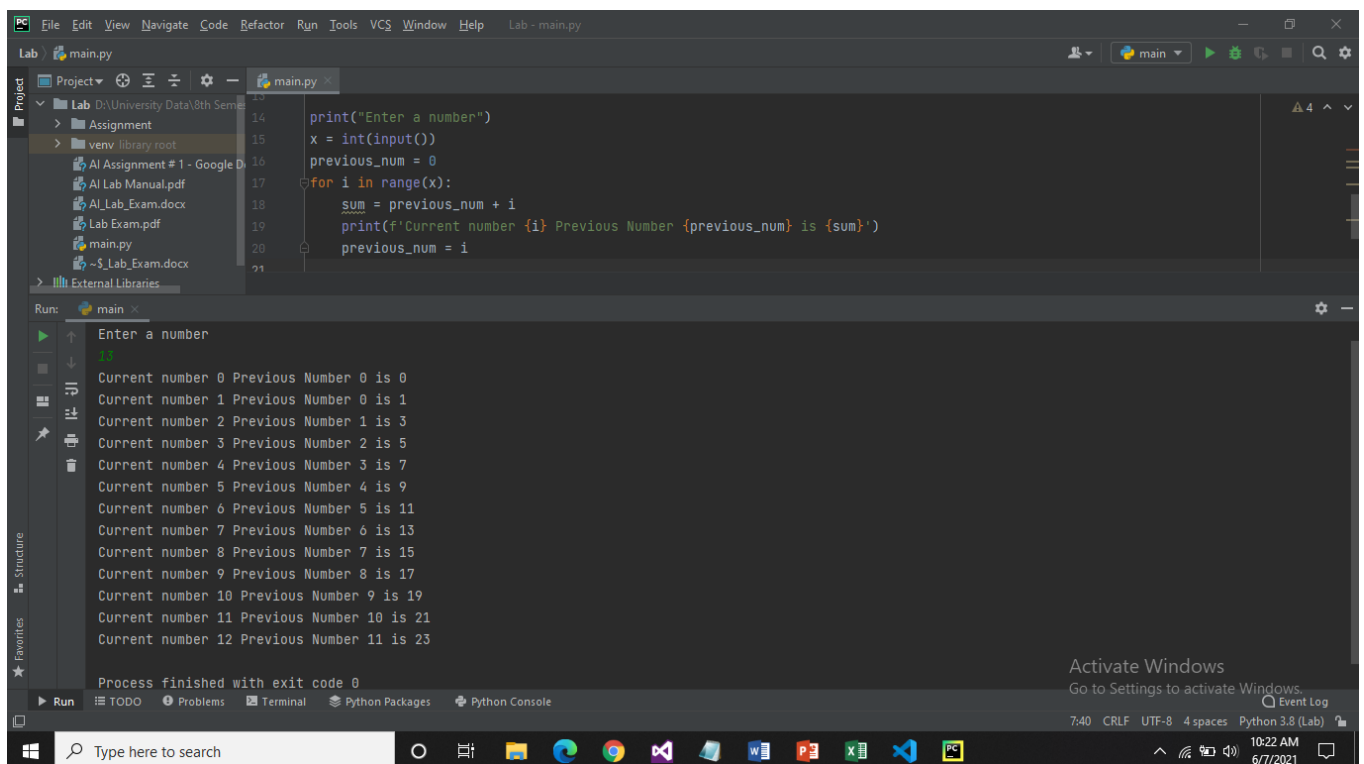
**Date:** 07-06- 2021

**Q 1. Input a range of numbers. Iterate from 0th number to the end number and print the sum of the current number and previous number.**

### Code:

```
print("Enter a number")
x = int(input())
previous_num = 0
for i in range(x):
    sum = previous_num + i
    print(f'Current number {i} Previous Number {previous_num} is {sum}')
    previous_num = i
```

### Output:



The screenshot shows a Python IDE with a project named 'Lab'. The file 'main.py' is open, displaying the code from the previous block. The 'Run' console at the bottom shows the output of the program. The user entered '13' as the number. The program then iterates from 0 to 12, printing the current number, the previous number, and their sum. The output is as follows:

```
Enter a number
13
Current number 0 Previous Number 0 is 0
Current number 1 Previous Number 0 is 1
Current number 2 Previous Number 1 is 3
Current number 3 Previous Number 2 is 5
Current number 4 Previous Number 3 is 7
Current number 5 Previous Number 4 is 9
Current number 6 Previous Number 5 is 11
Current number 7 Previous Number 6 is 13
Current number 8 Previous Number 7 is 15
Current number 9 Previous Number 8 is 17
Current number 10 Previous Number 9 is 19
Current number 11 Previous Number 10 is 21
Current number 12 Previous Number 11 is 23
Process finished with exit code 0
```

The IDE interface includes a menu bar (File, Edit, View, etc.), a toolbar, a project explorer on the left, and a status bar at the bottom showing the current file encoding (CRLF), line length (4 spaces), and Python version (3.8).

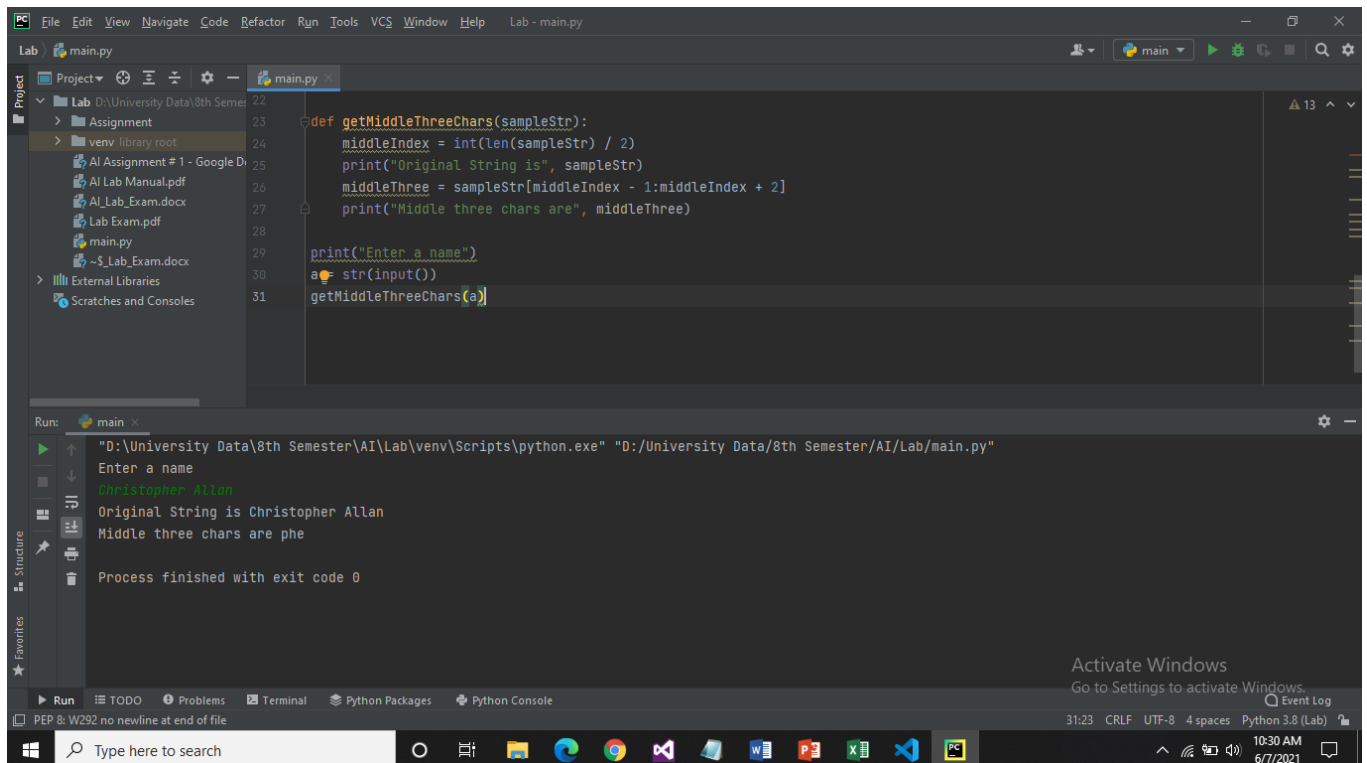
**Q 2. Given a string of odd length greater than 7, return a string made of the middle three characters of the given String**

**Code:**

```
def getMiddleThreeChars(sampleStr):  
    middleIndex = int(len(sampleStr) / 2)  
    print("Original String is", sampleStr)  
    middleThree = sampleStr[middleIndex - 1:middleIndex + 2]  
    print("Middle three chars are", middleThree)
```

```
print("Enter a name")  
a = str(input())  
getMiddleThreeChars(a)
```

**Output:**



The screenshot shows a Python IDE with a project named 'Lab'. The file 'main.py' is open, displaying the code from the previous blocks. The code defines a function 'getMiddleThreeChars' and uses it to process the input 'Christopher Allan'. The output in the console is as follows:

```
"D:\University Data\8th Semester\AI\Lab\venv\Scripts\python.exe" "D:/University Data/8th Semester/AI/Lab/main.py"  
Enter a name  
Christopher Allan  
Original String is Christopher Allan  
Middle three chars are phe  
Process finished with exit code 0
```

The IDE interface includes a menu bar, a toolbar, a project explorer on the left, and a status bar at the bottom showing the current time as 10:30 AM on 6/7/2021.