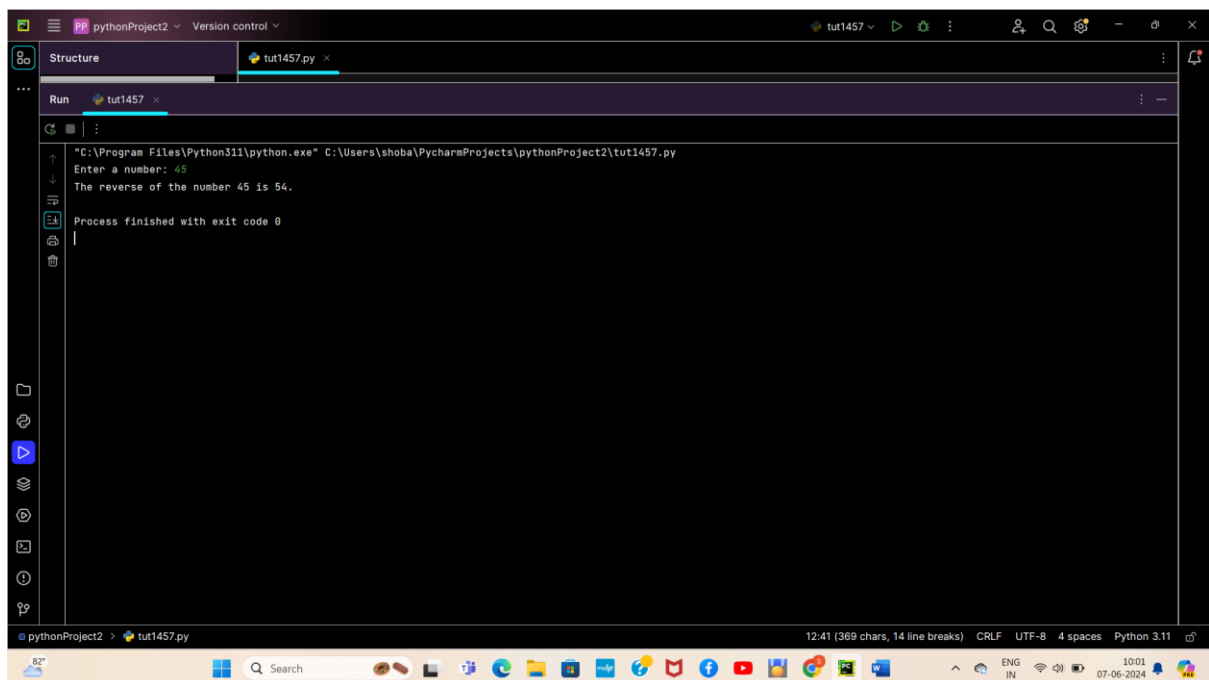


11. Write a program to find the reverse of a given number using recursive.

Program:

```
def reverse_number(n, reversed_n=0):  
    if n == 0:  
        return reversed_n  
    else:  
        last_digit = n % 10  
        reversed_n = reversed_n * 10 + last_digit  
        return reverse_number(n // 10, reversed_n)  
  
number = int(input("Enter a number: "))  
  
reversed_number = reverse_number(number)  
  
print(f"The reverse of the number {number} is {reversed_number}.")
```

Output:



The screenshot shows a Python IDE window titled 'pythonProject2'. The 'Run' console displays the following output:

```
"C:\Program Files\Python311\python.exe" C:\Users\shoba\PycharmProjects\pythonProject2\tut1457.py  
Enter a number: 45  
The reverse of the number 45 is 54.  
Process finished with exit code 0
```

The status bar at the bottom indicates the file is 'tut1457.py', the character count is 12:41 (369 chars, 14 line breaks), the encoding is CRLF, the file size is UTF-8, the indentation is 4 spaces, and the Python version is 3.11.

Time Complexity:  $O(\log_{10} n)$