CSA0670-Design and Analysis of Algorithms for Tractability Problems.

6. Write a program for to copy one string to another using recursion.

Program:

```python
def copy_string_recursive(source, dest, index=0):
    if index == len(source):
        return dest

    dest += source[index]

    return copy_string_recursive(source, dest, index + 1)


def copy_string(source):
    return copy_string_recursive(source, "")


source_string = "Hello, World!"
copied_string = copy_string(source_string)
print("Source string: '{}'".format(source_string))
print("Copied string: '{}'".format(copied_string))
```
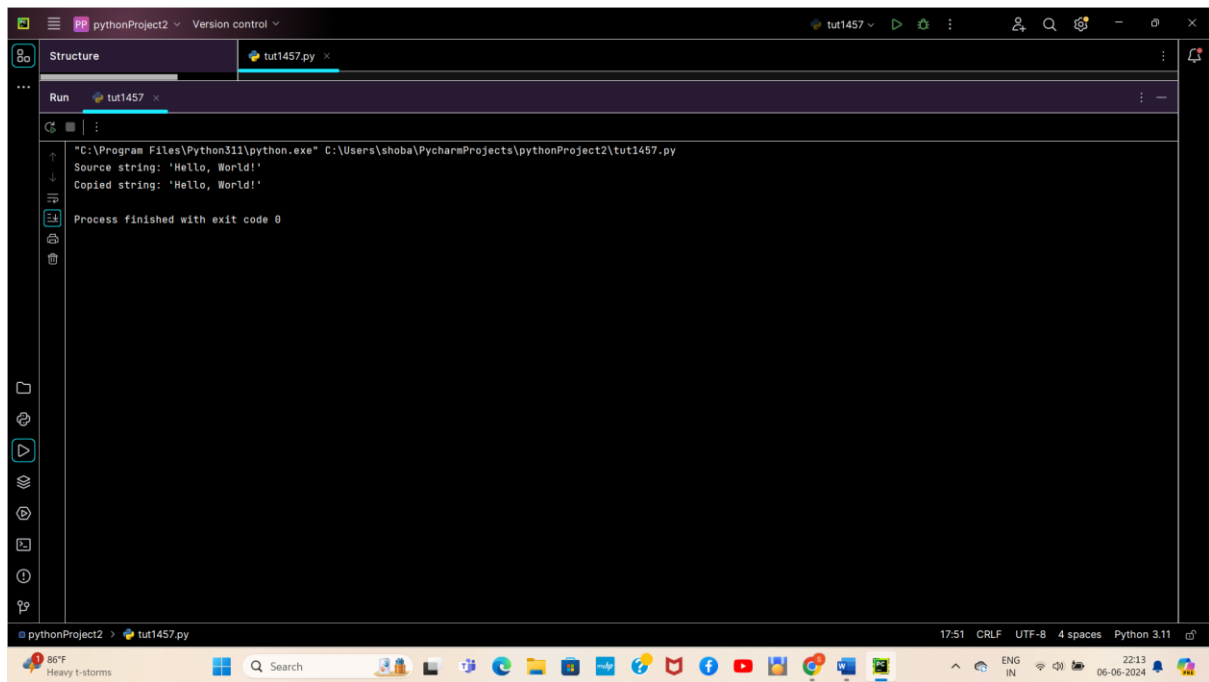
Output:

Time Complexity: O(n)