

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

**PROGRAM:**

```
def copy_string(source, destination, index=0):  
    if index == len(source):  
        return destination  
    destination += source[index]  
    return copy_string(source, destination, index + 1)
```

```
source_str = "Hello, World!"  
destination_str = ""  
result = copy_string(source_str, destination_str)  
print("Source String:", source_str)  
print("Copied String:", result)
```

**INPUT:**

"Hello, World!"

**OUTPUT:**

```
Source String: Hello, World!  
Copied String: Hello, World!
```

**TIME COMPLEXITY:**

Time complexity of the above code is

$f(n)=O(n)$