SR UNIVERSITY

School of Computer Science and Artificial Intelligence

Lab Assignment # 9.2

Program	**: B. Tech (CSE)**
Specialization	**:**
Course Title	**: AI Assisted Coding**
Course Code	**: 23CS002PC304**
Semester	**II**
Academic Session	**: 2025-2026**
Name of Student	**: Kothapally Srikanth**
Enrollment No.	**: 2403A51L42**
Batch No	**: 52**
Date	**: 06/02/26**

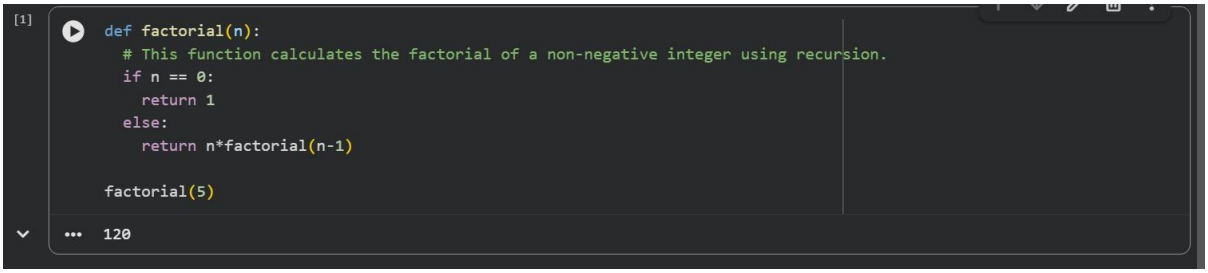
Task Description -1 (Documentation – Function Summary Generation)

Code used:

```
def factorial(n):
  if n == 0:
    return 1
  else:
    return n*factorial(n-1)
factorial(5)
```

Prompt: Add a short summary describing the purpose of the function in the code

Output:



SR UNIVERSITY

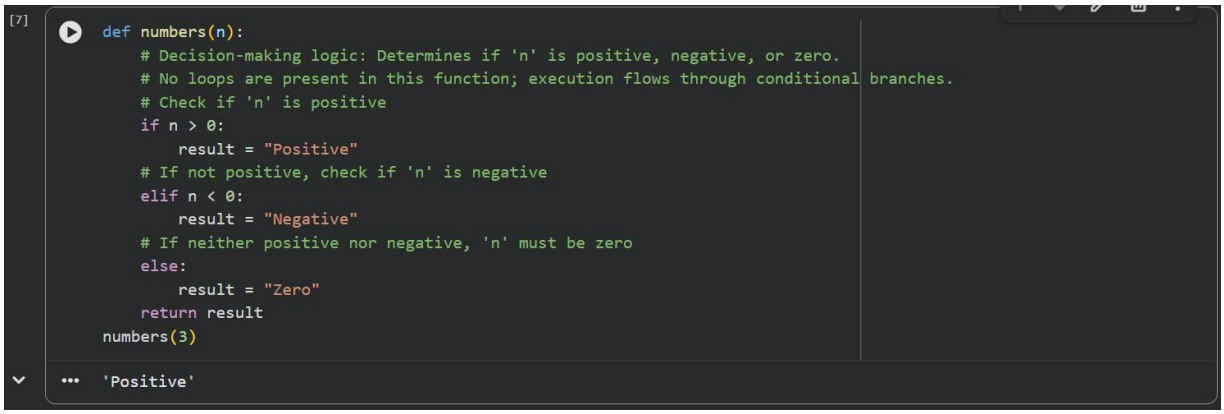
Task Description -2 (Documentation – Logical Explanation for Conditions and Loops)

Code Used:

```
def numbers(n):
    if n > 0:
        result = "Positive"
    elif n < 0:
        result = "Negative"
    else:
        result = "Zero"
    return result
numbers(3)
```

Prompt: explain only decision-making logic and loop behavior inside the code

Output:



SR UNIVERSITY

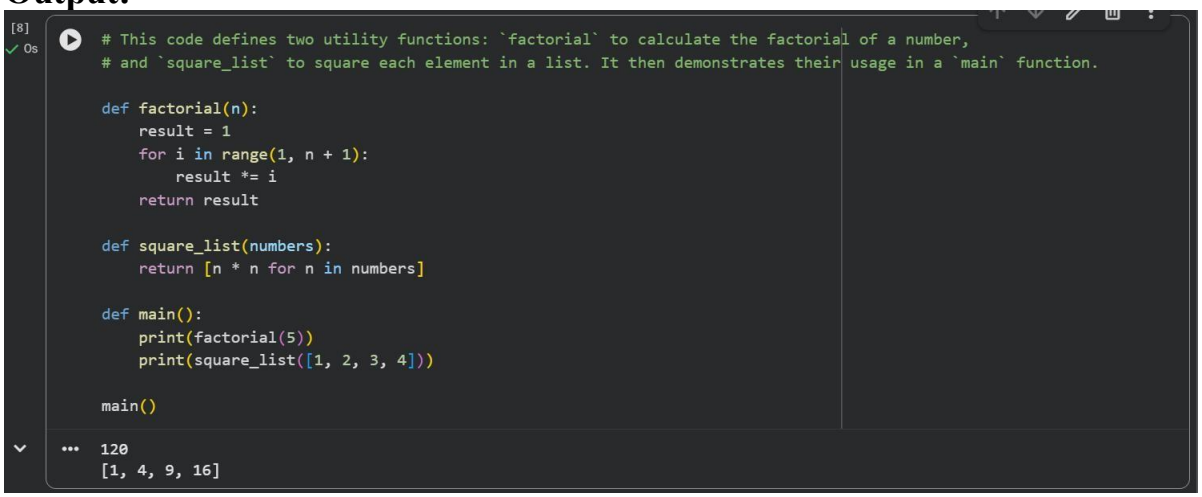
Task Description -3 (Documentation – File-Level Overview)

Code Used:

```
def factorial(n):
    result = 1
    for i in range(1, n + 1):
        result *= i
    return result

def square_list(numbers):
    return [n * n for n in numbers]

def main():
    print(factorial(5))
    print(square_list([1, 2, 3, 4]))

main()
```

Prompt: Generate a high-level overview summarizing the overall purpose and functionality of the Code. add the summary at the beginning

Output:



SR UNIVERSITY

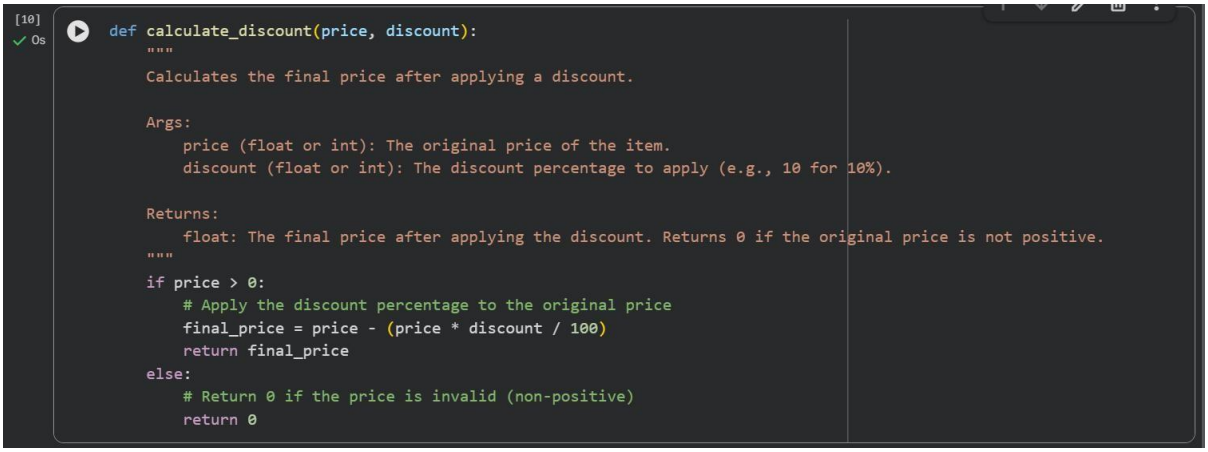
Task Description -4 (Documentation – Refine Existing Documentation)

Code Used:

```
def calculate_discount(price, discount):
    # calculate
    if price > 0:
        # apply discount
        final_price = price - (price * discount / 100)
        return final_price
    else:
        # wrong price
        return 0
```

Prompt: Rewrite the documentation to improve clarity and consistency.

Output:



SR UNIVERSITY

Task Description -5 (Documentation – Prompt Detail Impact Study)

Code Used:

```
def reverse_string(text):
    return text[::-1]
```

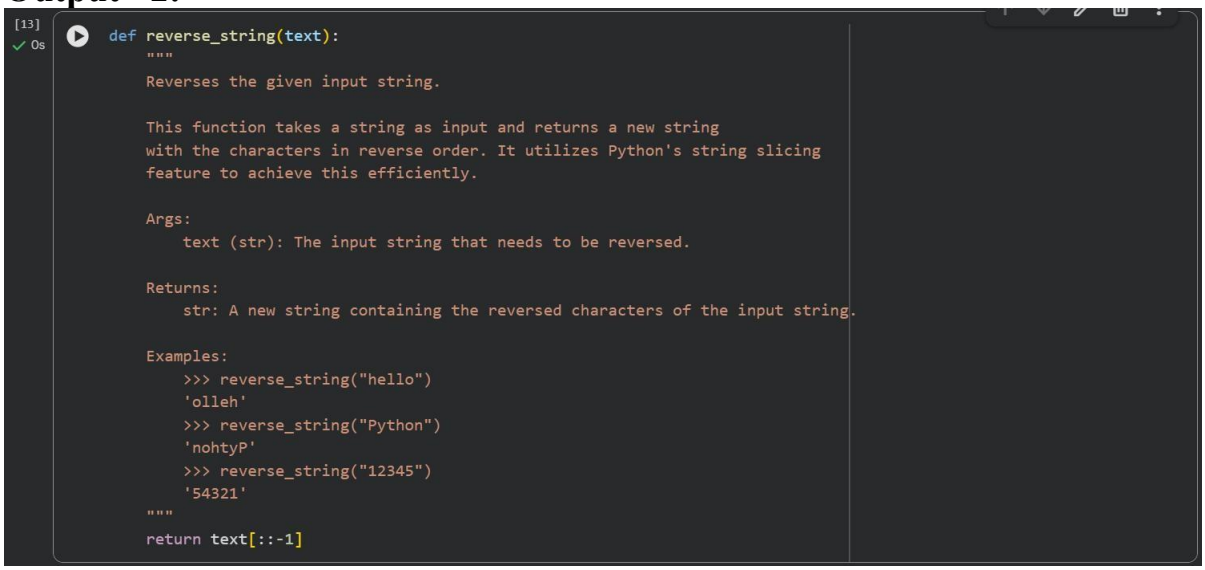
Prompt - 1: Write a short documentation comment explaining what this Python function does.

Output - 1:

```
[12]
✓ 0s
def reverse_string(text):
    """
    Reverses a given string.

    Args:
        text (str): The input string to be reversed.

    Returns:
        str: The reversed string.
    """
    return text[::-1]
```

Prompt - 2: Write a clear and detailed documentation comment for the given Python function.

Output - 2:



```
[13]
✓ 0s
def reverse_string(text):
    """
    Reverses the given input string.

    This function takes a string as input and returns a new string
    with the characters in reverse order. It utilizes Python's string slicing
    feature to achieve this efficiently.

    Args:
        text (str): The input string that needs to be reversed.

    Returns:
        str: A new string containing the reversed characters of the input string.

    Examples:
        >>> reverse_string("hello")
        'olleh'
        >>> reverse_string("Python")
        'nohtyP'
        >>> reverse_string("12345")
        '54321'
    """
    return text[::-1]
```