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Batch:51

Assignment-9.2

Task Description -1 (Documentation – Function Summary Generation)

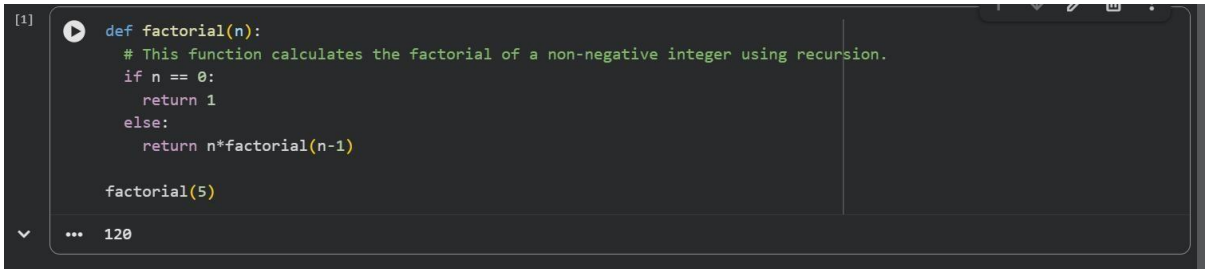
Code used:

```
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:



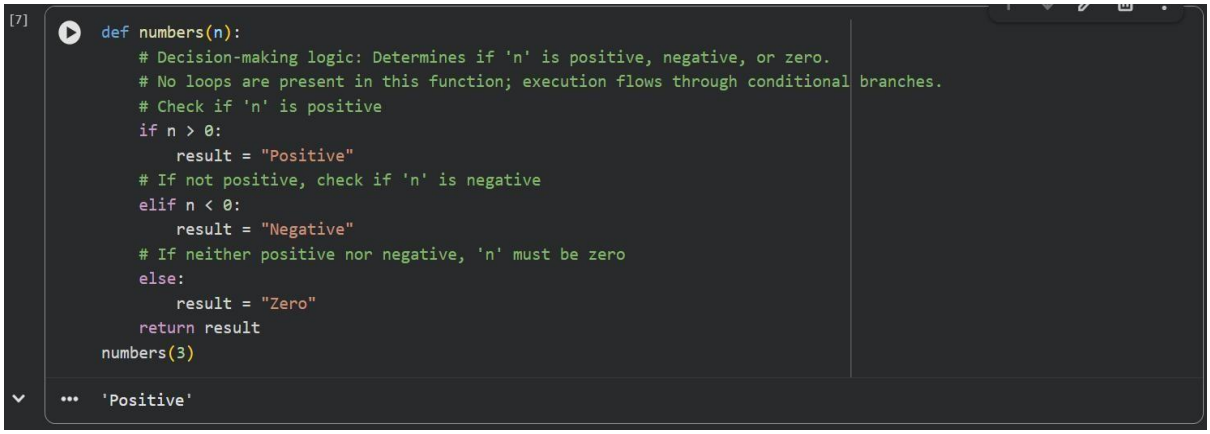
Task Description -2 (Documentation – Logical Explanation for Conditions and Loops)

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:



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

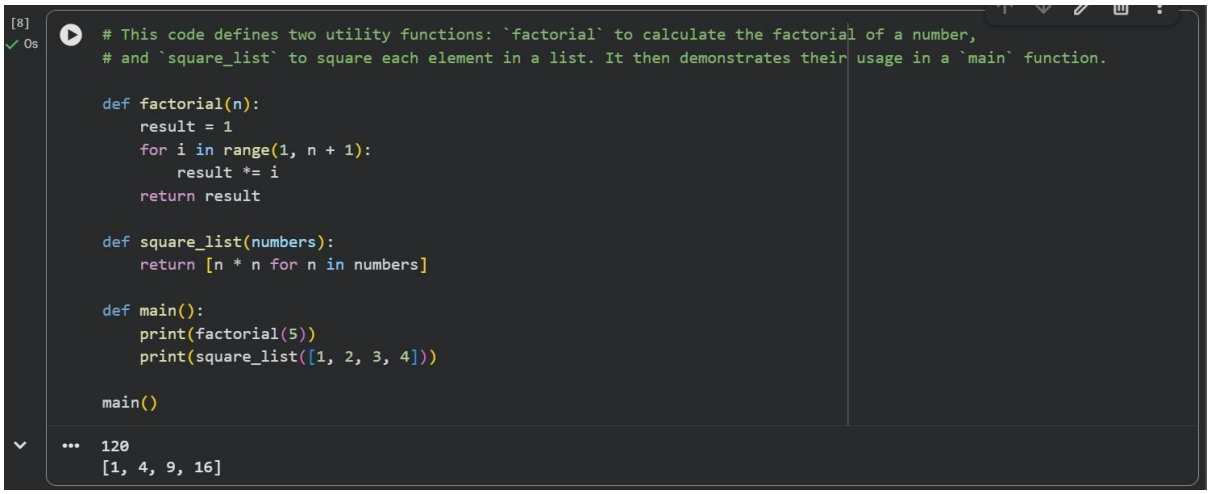
def square_list(numbers): return [n * n for n in numbers]

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:

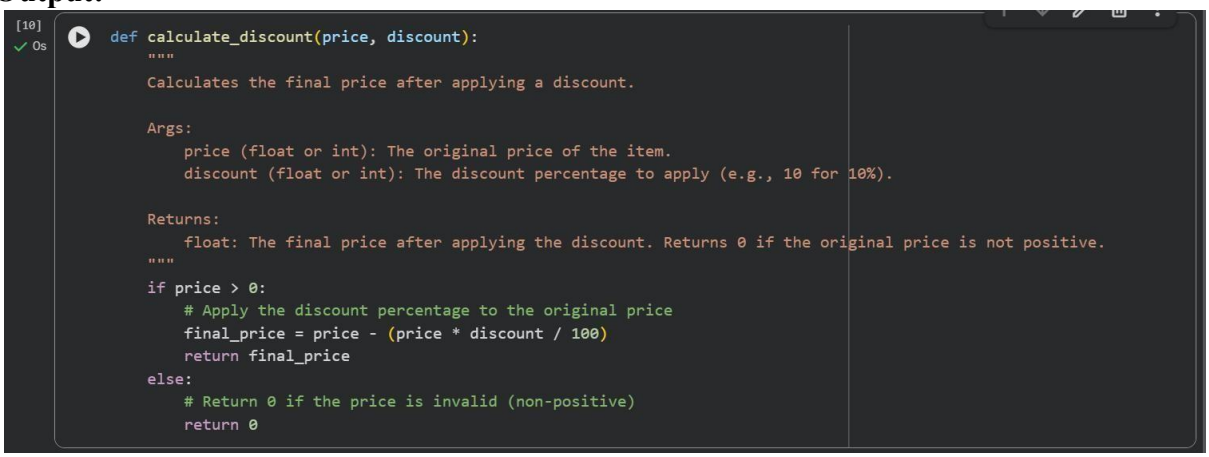


Task Description -4 (Documentation – Refine Existing Documentation)

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:



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:

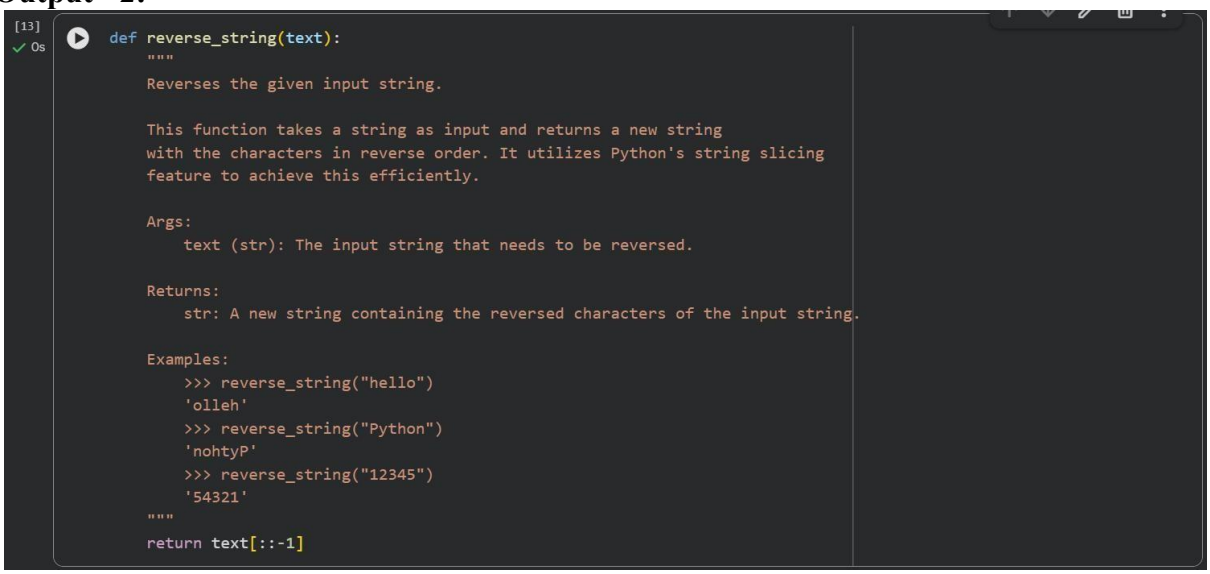
```
[12]
✓ 0s
def reverse_string(text):
    """
    Reverses a given string.

    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]
```