

Q1.

```
lines_list = []

with open("hello.txt", "r") as file:

    for line in file:

        lines_list.append(line.strip())

print(lines_list)
```

Output:

```
"C:\Users\jerom\Downloads\Python Prac\.venv\Scripts\python.exe" "C:\Users\jerom\Downloads\Python
['Hello', 'how', 'are', 'you?']

Process finished with exit code 0
```

Q2.

```
try:

    q=10/0

    print(q)

except ZeroDivisionError:

    print("Division by zero")
```

Output:

```
"C:\Users\jerom\Downloads\Python Prac\.venv\Scripts\python.exe" "C:\Users\jerom\Downloads\Python
Division by zero

Process finished with exit code 0
```

Q3.

```
def process_list(input_list):
    strings = []
    total = 0

    for item in input_list:
        if item.isdigit():
            total += int(item)
        else:
            strings.append(item)

    merged_strings = "#".join(strings) + "#"
    return merged_strings, total
```

```
input_list = ['100', 'welcome', 'hi', '200', '300', 'bye', 'welldone', '500']
result_strings, result_sum = process_list(input_list)
```

```
print(result_strings)
```

```
print(result_sum)
```

Output:

```
"C:\Users\jerom\Downloads\Python Prac\.venv\Scripts\python.exe" "C:\Users\jerom\Downloads\Python
welcome#hi#bye#welldone#
1100

Process finished with exit code 0
```

Q4.

```
def sort_dict_and_sum_middle(input_dict):
    sorted_dict = dict(sorted(input_dict.items(), key=lambda x: x[1]))

    values = list(sorted_dict.values())

    n = len(values)
    if n % 2 == 0:
        middle_sum = values[n // 2 - 1] + values[n // 2]
    else:
        middle_sum = values[n // 2 - 1] + values[n // 2]

    return sorted_dict, middle_sum

input_dict1 = {"x": 5, "y": 15, "z": 25}
sorted_dict1, middle_sum1 = sort_dict_and_sum_middle(input_dict1)
print("Sorted Dictionary:", sorted_dict1)
print("Sum of middle two values:", middle_sum1)

input_dict2 = {"x": 5, "y": 15, "z": 25, "p": 12}
sorted_dict2, middle_sum2 = sort_dict_and_sum_middle(input_dict2)
print("Sorted Dictionary:", sorted_dict2)
print("Sum of middle two values:", middle_sum2)
```

Output:

```
"C:\Users\jerom\Downloads\Python Prac\.venv\Scripts\python.exe" "C:\Users\jerom\Downloads\Python
Sorted Dictionary: {'x': 5, 'y': 15, 'z': 25}
Sum of middle two values: 20
Sorted Dictionary: {'x': 5, 'p': 12, 'y': 15, 'z': 25}
Sum of middle two values: 27
Process finished with exit code 0
```