

Q1.

```
from collections import Counter
```

```
arr = [1,2,2,3,3,4,4,4,4,5,5,5,5]
```

```
freq = Counter(arr)
```

```
sorted_arr = sorted(arr, key=lambda x: (-freq[x], x))
```

```
print(sorted_arr)
```

Output:

```
"C:\Users\jerom\Downloads\Python Prac\.venv\Scripts\python.exe" "C:\Users\jerom\
[5, 5, 5, 5, 5, 4, 4, 4, 4, 2, 2, 3, 3, 1]

Process finished with exit code 0
```

Q2.

```
startswith=lambda s,ch: s.startswith(ch)
```

```
print(startswith("Jerome", "J"))
```

Output:

```
"C:\Users\jerom\Downloads\Python Prac\.venv\Scripts\python.exe" "C:\Users\jerom\
True
```

Q3.

```
words = ["python", "lambda", "coding", "filter", "length", "short"]
```

```
result = list(filter(lambda w: len(w) == 6, words))
```

```
print(result) # ['python', 'lambda', 'coding', 'filter', 'length']
```



Output:

```
"C:\Users\jerom\Downloads\Python Prac\.venv\Scripts\python.exe" "C:\Users\jerom\
['python', 'lambda', 'coding', 'filter', 'length']
```

Q4.

fib = lambda n: [0, 1] if n > 1 else [0]

def fibonacci(n):

seq = fib(n)

for i in range(2, n):

seq.append(seq[-1] + seq[-2])

return seq

print(fibonacci(10))

Output:

```
"C:\Users\jerom\Downloads\Python Prac\.venv\Scripts\python.exe" "C:\Users\jerom\
[0, 1, 1, 2, 3, 5, 8, 13, 21, 34]
```