FCFS

import matplotlib.pyplot as plt

def fcfs\_disk\_scheduling(requests, initial\_position):

current\_position = initial\_position

total\_movement = 0

order\_of\_requests = [initial\_position]

for request in requests:

movement = abs(request - current\_position)

total\_movement += movement

order\_of\_requests.append(request)

current\_position = request

return order\_of\_requests, total\_movement

def plot\_fcfs(order\_of\_requests):

plt.figure(figsize=(10, 6))

plt.plot(order\_of\_requests, marker='o', linestyle='-')

plt.title('Disk Scheduling - FCFS ')

plt.xlabel(' Sequence')

plt.ylabel(' Number')

plt.xticks(range(len(order\_of\_requests)), [f"R{i}" for i in range(len(order\_of\_requests))])

plt.grid()

plt.axhline(y=order\_of\_requests[0], color='r', linestyle='--', label='Initial Position')

plt.legend()

plt.show()

# Example usage

initial\_position = 53

requests = [98,183,37,122,14,124,65,67]

order, total\_movement = fcfs\_disk\_scheduling(requests, initial\_position)

print("Order of Requests Served:", order)

print("Total Disk Movement:", total\_movement)

# Plot the graph

plot\_fcfs(order)

