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Monday

Lab 9

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1BM18CS019

Write a program for congestion control using Leaky bucket algorithm

```
class LeakyBucket:

    def __init__(self, bucket_size, output_rate, packets):
        self.bucket_size = bucket_size
        self.output_rate = output_rate
        self.packets = packets


    def algorith(self):
        for i in range(len(self.packets)):
            print(f"Packet {i}, size = {packets[i]}")
            if packets[i] > bucket_size:
                print("Bucket overflow.")
            else:
                while(packets[i] < output_rate):
                    print(packets[i], "Outputted")
                    packets[i] -= output_rate
                if packets[i]:
                    print(f"Last {packets[i]} bytes sent.")
            print("Bucket Output Successfull.")

def main():
    bucket_size = int(input("Enter Bucket Size: "))
```

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```
output_rate = int(input("Enter Output Rate "))
packets = list(map(int, input("Enter packets:").split()))
lb = LeakyBucket(bucket_size, output_rate, packets)
lb.algorith()

if __name__ == "__main__":
    main()
```