

#tech ht (13.1.25)

```
def canCompleteCircuit(gas, cost):
```

```
    total_gas = 0
```

```
    total_cost = 0
```

```
    start_station = 0
```

```
    current_gas = 0
```

```
    for i in range(len(gas)):
```

```
        total_gas += gas[i]
```

```
        total_cost += cost[i]
```

```
        current_gas += gas[i] - cost[i]
```

```
    if current_gas < 0:
```

```
        start_station = i + 1
```

```
        current_gas = 0
```

```
    return start_station if total_gas >= total_cost else -1
```

```
print("Gas Station Output 1:", canCompleteCircuit([1, 2, 3, 4, 5], [3, 4, 5, 1, 2]))
```

```
print("Gas Station Output 2:", canCompleteCircuit([2, 3, 4], [3, 4, 3]))
```

#question 2

```
def candy(ratings):
```

```
    n = len(ratings)
```

```
    candies = [1] * n
```

```
    for i in range(1, n):
```

```
        if ratings[i] > ratings[i - 1]:
```

```
            candies[i] = candies[i - 1] + 1
```

```
    for i in range(n - 2, -1, -1):
```

```
        if ratings[i] > ratings[i + 1]:
```

```
            candies[i] = max(candies[i], candies[i + 1] + 1)
```

```
    return sum(candies)
```

```
print("Candy Distribution Output 1:", candy([1, 0, 2])) # Output: 5
```

```
print("Candy Distribution Output 2:", candy([1, 2, 2])) # Output: 4
```