In [6]:
```
climate_data = [
    {"city": "City A", "temperature":25, "carbon_footprint":500},
    {"city": "City B", "temperature":30, "carbon_footprint":350},
    {"city": "City C", "temperature":22, "carbon_footprint":600},
    {"city": "City D", "temperature":15, "carbon_footprint":200},
    {"city": "City E", "temperature":28, "carbon_footprint":450},
]
high_temp_threshold = 26
high_temp_cities = [city for city in climate_data if city["temperature"] > hig
print("cities with high temperature (>26):")
for city in high_temp_cities:
    print(f"{city['city']}) - {city['temperature']}")
```

```
cities with high temperature (>26):
City B) - 30
City E) - 28
```

using loop

In [7]:
```
total_carbon = 0
for city in climate_data :
    total_carbon += city["carbon_footprint"]
average_carbon_footprint = total_carbon /len(climate_data)
print(f"\ Average Carbon Footprint:{average_carbon_footprint:2f} kg CO2")
```

```
\ Average Carbon Footprint:420.000000 kg CO2
```

In [8]:
```
sustainability_threshold =400
sustainable_cities = list(filter(lambda city: city["carbon_footprint"] <susta
print("\n sustainable cities(carbon footprint < 400 kg co2):")
for city in sustainable_cities:
    print(f"{city['city']}-{city['carbon_footprint']} kg co2")
```

```
 sustainable cities(carbon footprint < 400 kg co2):
City B-350 kg co2
City D-200 kg co2
```

In [11]:
```
highest_footprint_city = max(climate_data, key=lambda city:city["carbon_footpr
print(f"\n city with the highest carbo footprint:")
print(f"{highest_footprint_city['city']}-{highest_footprint_city['carbon_footp
```

```
 city with the highest carbo footprint:
City C-600 kg co2
```