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# Re-executing the provided Python script for carbon footprint estimation
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```
import random
```

```
# Carbon footprint factors (in kg CO2 per unit)
```

```
carbon_factors = {  
    "electricity": 0.5, # kg CO2 per kWh  
    "transport_car": 2.3, # kg CO2 per liter of fuel  
    "public_transport": 0.1, # kg CO2 per km  
    "meat_consumption": 27, # kg CO2 per kg of meat  
    "plant_based_diet": 2, # kg CO2 per kg of plant food  
}
```

```
# AI-driven recommendations
```

```
tips = [  
    "Switch to renewable energy sources like solar or wind.",  
    "Use public transport, cycle, or walk instead of driving.",  
    "Adopt a plant-based diet to reduce food-related emissions.",  
    "Reduce, reuse, and recycle to minimize waste.",  
    "Use energy-efficient appliances to save electricity."  
]
```

```
def estimate_carbon_footprint(electricity, transport_car, public_transport, meat, plants):
```

```
    """Calculate the estimated carbon footprint."""
```

```
footprint = (  
    electricity * carbon_factors["electricity"] +  
    transport_car * carbon_factors["transport_car"] +  
    public_transport * carbon_factors["public_transport"] +  
    meat * carbon_factors["meat_consumption"] +  
    plants * carbon_factors["plant_based_diet"]  
)  
  
return footprint
```

```
def get_suggestion():  
    """Return a random sustainability tip."""  
    return random.choice(tips)
```

```
# Example user input
```

```
user_footprint = estimate_carbon_footprint(  
    electricity=300, # kWh per month  
    transport_car=50, # liters of fuel per month  
    public_transport=100, # km per month  
    meat=5, # kg of meat per month  
    plants=10 # kg of plant-based food per month  
)
```

```
# Output results
```

```
user_footprint, get_suggestion()
```

