Pythonda JSON bilan ishlash

1. JSON nima?

JSON (JavaScript Object Notation) - bu ma'lumotlarni saqlash va almashish uchun ishlatiladigan eng mashhur formatlardan biridir.

2. Python va JSON

Python 'json' moduli yordamida JSON fayllar bilan o'qish, yozish va tahrirlash mumkin.

3. Asosiy funksiyalar:

- json.load(): Fayldan JSON o'qish

- json.loads(): JSON matnni (string) Python obyektiga aylantirish

- json.dump(): Python obyektini JSON formatda faylga yozish

- json.dumps(): Python obyektini JSON matn ko'rinishiga aylantirish

4. Misollar:

```python
import json

# JSON matnni Python obyektiga aylantirish
data = '{"name": "Husan", "age": 20}'
parsed = json.loads(data)
print(parsed['name'])  # Husan

# Python obyektini JSON matnga aylantirish
obj = {'name': 'Husan', 'age': 20}
```

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```python
json_str = json.dumps(obj)

print(json_str)  # {"name": "Husan", "age": 20}


# Faylga yozish

with open('data.json', 'w') as f:

    json.dump(obj, f)


# Fayldan o'qish

with open('data.json') as f:

    content = json.load(f)

    print(content)
```

5. Foydali parametrlar:

- indent=4: JSON matnni chiroyli ko'rinishda yozish uchun

- sort_keys=True: Kalit so'zlarni alifbo tartibida yozish

```python
# Misol:

json.dumps(obj, indent=4, sort_keys=True)
```

Ushbu qo'llanma JSON bilan ishlashni boshlash uchun asosiy bilimlarni beradi.