

# Advanced Python REST API with Flask

## Return JSON with Flask

- Use `jsonify` to automatically return JSON data in your views

```
@bp.route("/api/list/")
def show_list():
    list_of_dicts = [
        {
            "name": "Tim",
            "city": "Vancouver",
        },
        {
            "name": "John",
            "city": "Toronto",
        }
    ]
    return jsonify(list_of_dicts)
```

## Serialize/deserialize data

- Some data types cannot be serialized natively into JSON
- You must serialize them first!
- Typically using dictionaries (attributes / values)

```
@bp.route("/api/list/")
def show_list():
    manager = ObjectManager()
    list_of_objects = [
        obj.to_dict() for obj in manager.get_objects()
    ]
    return jsonify(list_of_objects)
```

## Process arguments and parameters

```
@bp.route("/api/detail/<int:number>/")
def show_detail(number):
    # Return data for that specific number
    pass
```

```
from flask import request
@bp.route("/api/list/")
def show_list():
    order = request.args.get("order", False)
    # Will match when the request is /api/list?order=yes
    if order == 'yes':
        list_of_objects.sort()
    return jsonify(list_of_objects)
```