Python Programming Guide
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Python adalah bahasa pemrograman tingkat tinggi yang mudah dipelajari dan powerful.
Python mendukung multiple programming paradigms, termasuk procedural, object-oriented, dan functional
programming.

Fitur-fitur utama Python:
- Syntax yang sederhana dan mudah dibaca
- Interpreted language
- Dynamic typing
- Extensive standard library
- Large ecosystem of third-party packages

Python sangat populer untuk:
- Web development (Django, Flask)
- Data science dan machine learning
- Automation dan scripting
- Desktop applications
- Scientific computing

Contoh kode Python sederhana:
```python
print("Hello, World!")
```

```python
for i in range(5):
print(f"Number: {i}")
```

Python memiliki philosophy "The Zen of Python" yang menekankan pada code readability dan simplicity.
Beautiful is better than ugly.
Explicit is better than implicit.
Simple is better than complex.
Complex is better than complicated.

Python juga mendukung berbagai paradigma pemrograman:
1. Procedural Programming
2. Object-Oriented Programming
3. Functional Programming

Untuk memulai dengan Python, Anda perlu menginstall Python dari python.org dan memilih text editor atau
favorit seperti VSCode, PyCharm, atau Sublime Text.

Python Package Manager (pip):
```
pip install package_name
pip install -r requirements.txt
pip list
pip freeze > requirements.txt
```

Virtual Environment:
```
python -m venv venv
source venv/bin/activate # Linux/Mac
venv\Scripts\activate # Windows
```

Python Data Types:
- Numeric: int, float, complex
- Sequence: str, list, tuple

- Mapping: dict
- Set: set, frozenset
- Boolean: bool
- Binary: bytes, bytearray

Control Structures:
- if/elif/else statements
- for loops
- while loops
- try/except/finally
- with statements