PYTHON BASICS + ANACONDA TOOLS (NOTES)

1. PRINT()

- Used to display/output something.

Example:

```
print("Hello World")
```

2. VARIABLES

Containers for storing values.

```
name = "Asmi"

age = 21
```

3. DATA TYPES

- int: 10

- float: 10.5

- string: "Hello"

- boolean: True/False

4. LIST

- Changeable, ordered.

```
fruits = ["apple", "banana"]

fruits.append("mango")
```

5. TUPLE

- Same as list but NOT changeable.

```
colors = ("red", "green")
```

6. DICTIONARY

- Key-value pairs.

```
student = {"name":"Asmi", "age":21}
```

7. LOOPS

FOR loop:

```
for i in range(5):
    print(i)
```

WHILE loop:

```
count = 1
while count <= 5:
    print(count)
    count += 1
```

8. FUNCTIONS

```
def greet():
    print("Hello")
```

```
def add(a, b):
    return a + b
```

ANACONDA TOOLS (INSIDE ANACONDA NAVIGATOR)

1. JUPYTER NOTEBOOK

- Browser-based notebook

- Run Python code cell-by-cell

2. SPYDER

- Python IDE similar to MATLAB

3. VS CODE

- Popular code editor

4. ENVIRONMENTS

- Create and manage different Python versions

5. JUPYTERLAB

- Advanced version of Jupyter Notebook

6. ANACONDA POWERSHELL / TERMINAL

- Used to install packages using 'conda install'

RUNTIME SELECTION (IN JUPYTER)

Recommended: anaconda-2024.02-py310

Reason: Stable, clean, beginner-friendly.