

🌟 Variables In Python

Variables are like containers that store data values. In Python, you don't need to declare the type of a variable, as the language is dynamically typed. This means you can just assign a value to a variable, and Python will handle the rest.

Syntax

```
variable_name = value
```

🚀 Why Use Variables?

- **Store Data:** Variables allow you to store data that can be used and manipulated throughout your code.
- **Readability:** They make your code more readable by giving meaningful names to data.
- **Flexibility:** Variables enable you to easily update and manage data values.

🚀 Rules For Variable Name

- Variable names are case sensitive, i.e., a and A are different.
- A variable name can consist of letters and alphabets.
- A variable name cannot start with a number.
- Keywords are not allowed to be used as a variable name.
- Blank spaces are not allowed in a variable name.
-

🎉 Variable Examples

Example 1: Storing a Name

```
name = "John Doe"  
print(name)
```

Example 2: Print Your Name and Address

```
age = 30  
print(age)
```

Example 3: Print Your Full Name From First and Last Name

```
first_name = "Bishworaj"
```

```
last_name = "Poudel"
print(f"My full name is {first_name} {last_name}")
```

Example 4: Find Difference Between Income and Expenses

```
income = 70000
expenses = 41000

print(f"Income is Rs. {income}")
print(f"Expenses is Rs. {expenses}")
print(f"Balance is Rs. {income-expenses}")
```

Example 5: Basic Calculation in Python Session

```
num1 = 10
num2 = 3

sum = num1 + num2 # 13
diff = num1 - num2 # 7
mul = num1 * num2 # 30
div = num1 / num2 # 3.333333

# Mod is remainder after division
mod = num1 % num2
intdiv = num1 // num2
cube = num1 ** 3

print(f"Sum is {sum} and diff is {diff}")
print(f"Mul is {mul}")
print(f"Div is {div}")
print(f"Mod is {mod}")
```

```
print(f"Int div is {intdiv}")  
print(f"Cube is {cube}")
```

Challenge 2: Your Finance Manager

Write down what you spend each day from Sunday to Saturday, add them up to find the total for the week, and figure out the average amount spent per day.