In [4]:
```python
# variable_name = value
```

In [8]:
```python
# Example1 - Integer variable
age =25
print(age)
```

25

In [10]:
```python
# Example 2 - String variable
name ='Alice'
print(name)
```

Alice

In [12]:
```python
#Example 3 - Float variable
price =19.9
print(price)
```

19.9

In [14]:
```python
# Example 4 - Boolean variable
is_active=True
print(is_active)
```

True

In [44]:
```python
1# storing and printing value
x=10
print(x)
```

10

In [50]:
```python
2# using variable in Expression
a=5
b=3
result=a+b
print(result)
```

8

In [52]:
```python
3# changing the value of variable
score=50
print(score)
score=100
print(score)
```

50
100

In [54]:
```python
4# concatenating strings
first_name='Abhishek'
last_name='Sinha'
full_name=first_name + " " +last_name
print(full_name)
```

Abhishek Sinha

```
In [56]: 5# using variable in calculation
         length=10
         width=5
         # calculating area of rectangle
         area=length*width
         print(area)
```

50

```
In [58]: # Reassigning value to variable
         x=10
         print(x)
         x=20
         print(x)
```

10
20

Notes

Variables can store any type of data, including numbers, strings, lists, dictionaries, objects, etc. Variables are dynamic, meaning their type is automatically determined by the value assigned to them, and they can change type during execution.

```
In [ ]: # python variable
        variable is a name that refers to a memory location where a value is stored.
        variable is a container for data.

        Dynamic Typing: no need to declare any variable like (int, float, string)
        No Explicit Declaration: Just assign a value, and Python will automatically create
        Mutable: You can change the value of a variable as many times as you need during th

        Rules to define variable in python :-
        Must start with a letter (a-z, A-Z) or an underscore (_).
        Can contain letters, digits (0-9), and underscores, but cannot start with a digit.
        Case-sensitive: age, Age, and AGE are different variables.
        Cannot be a Python keyword (e.g., True, False, if, for, class, etc.).
```