

4 Sep 2021

## Python Variables

lec 8

- ⇒ Variables are containers to store values
- ⇒ The value can be anything including numbers, strings, lists etc.
- ⇒ No need to declare variables before using them or ~~and~~ no need to declare their datatype.
- ⇒ A variable is created the moment you first assign some value to it.
- ⇒ So we can say a variable is a name given to a memory location.

e.g:- ~~the~~  $a = 1$   
 $b = \text{"Jenny"}$  or  $b = \text{'Jenny'}$

$a$  &  $b$  are variables holding integer value & string respectively.

→ print(a) will print 1  
→ print(b) will print Jenny

eg:- if we keep writing phone numbers in our diary without giving them name then when next time we look our diary then there is no way we can figure out whose number is this. So first we write name of the person & then his/her phone number so that in future we can use that.

Jenny · 9772812345

So in programming we call Jenny a variable

Jenny = 9772812345

But as the name suggests variables can vary, means we can change their value.

e.g: -

```
name = "Jenny"
print(name)
name = "Jiya"
print(name)
```

Output:-

Jenny  
Jiya

exercise 1:-

Calculate length of any given name.

```
name = input("What is your name? ")
length = len(name)
print(length)
```

output:-

What is your name? Jenny  
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NOTE:- len() is a function to calculate length of any string.

More about string & its function will be discussed in later videos.