

Python- Dynamically Typed Language

- When a variable is declared , it must be initialise as well
- Variables do not have a specific data type , it's type depends on the value assigned to it.

Ex :

X = 25 - integer type

X = 13.75 - float type

X = 'A' - string type

- For the above example we can say that, Python is a dynamically typed language meaning while defining a variable we don't have to give its data type explicitly like in any other languages such as c++ , Java
- To know what type of data is provided to the variable we use function type(x)

Ex :

```
type help, copyright, ...
>>> x=25
>>> type(x)
<class 'int'>
>>> |
```

- The above result is <class 'int '> meaning the given data type belongs to a class of integer
- As we know every thing in python is an object and every object will have its own class
- The class is decided on the type of value assigned to the variable.