

Assignment Day-2.

1. python and its syntax.

Python has a very simple syntax, hence which makes it to learn quickly and easy. For example:

```
In [1]: print("hello world!")  
hello world!
```

Here we can see that it just takes one line to print hello world, compared to other PL's. Probably this can be the smallest peice of code.

backslash

Backslash in a special character \ also called the escape character. Its used in representing whitespace characters: \t . \n , \r , \...for example:

```
In [3]: print("cat", "dog", "fox")  
cat dog fox
```

```
In [4]: print("cat\tdog")  
cat      dog
```

```
In [5]: print("cat\ndog")  
cat  
dog
```

Triple quotes

to create stringss in python we use triple quotes similar to double quotes ""abc"" or "abc" for example:

```
In [6]: print(''abc'')
```

```
abc
```

```
In [7]: print("abc")
```

```
abc
```

string inside the quotes

```
In [8]: print(''She said, "thank you!Its mine."''')
```

```
She said, "thank you!Its mine."
```

Escape sequence of a string

\ prints backslash,for example

```
In [9]: print("\\")
```

```
\
```

\' print single quotes

```
In [12]: print("\'')
```

```
,
```

2. variables

A variable is a name given to a specific object in order to allocate some memory in the RAM.

rules to write a variable name.

---> A variable cannot start with number.

---> A variable cannot have special symbols.

---> A variable can start with _ underscore.

---> it can have alpha-numeric values.

---> Its case-sensitive.

```
In [13]: 12="abc"

File "<ipython-input-13-a594abbfbdf9>", line 1
      12="abc"
          ^
SyntaxError: can't assign to literal
```

```
In [17]: _=2
```

```
In [18]: _
```

```
Out[18]: 2
```

```
In [19]: A=23
```

```
In [20]: a=34
```

```
In [21]: A
```

```
Out[21]: 23
```

```
In [22]: a
```

```
Out[22]: 34
```

3. operators

Airthmetic operator - Addition, Subtraction, exponentiation, multiplication and so on..

```
In [24]: print(2+3)
```

```
5
```

```
In [25]: print(3-2)
```

```
1
```

```
In [26]: print(3**2)
```

9

```
In [28]: print(10%2)
```

0

```
In [29]: print(10/2)
```

5.0

assignment operator - +=, -= , == ,/=, %= ..

```
In [34]: a=9
```

```
In [35]: a
```

```
Out[35]: 9
```

```
In [43]: a=2  
a+=3  
print(a)
```

5

```
In [44]: a=2  
a-=1  
print(a)
```

1

```
In [45]: a=2  
a*=3  
print(a)
```

6

Comparison operator : ==, !=, >, < , >=, <=

```
In [46]: x=5  
y=3  
print(x==y)
```

False

```
In [47]: x=5  
y=3  
print(x!=y)
```

True

```
In [48]: x=5  
y=3  
print(x>y)
```

True

```
In [49]: x=5  
y=3  
print(x<y)
```

False

```
In [50]: x=5  
y=3  
print(x>=y)
```

True

Logical operators: and, or , not

```
In [51]: x=5  
print(x>3 and x<10)
```

True

```
In [53]: x=5  
print(x>3 or x<10)
```

True

```
In [55]: x=5  
print(not(x>3 and x<10))
```

False

Identity operator: is , is not

```
In [58]: x=6  
y=9  
print(x is not y)
```

True

```
In [57]: x=8  
y=8  
print(x is y)
```

True

Membership operator: in , not in

```
In [59]: x="my name is vaishnavi priya"  
print("v" in x)
```

True

```
In [60]: x="my name is vaishnavi priya"  
print("v" not in x)
```

False

```
In [ ]:
```