

```
In [6]: a=10  
        b=20  
        c=a+b  
        print(c)
```

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Today is Tuesday

Tuesday

Wednesday

Identifiers

-A name in python program is called identifier

-class name,function name,module name,variable name

eg.a=10

a<- Identifier

def test

class car

1.The only allowed characters in python are

-alphabet symbol(a-z)

-digits(0-9)

-Underscore symbol(_)

cash=100

ca\$h=100 : this will give syntax error

2.Identifier should not start with digits

total123=100 : this is valid

123total=100 : this will give syntax error

3.Identifiers are case sensitive

eg. total=100 Total=100 TOTAL=100

The all variables above will be considered different

4. We can not use reserved keyword as identifiers

`def=10` : This will give syntax error as `def` is reserved keyword

`DEF=10` : This is valid

Following are some keyword

Python Reserved Keywords				
<code>False</code>	<code>class</code>	<code>finally</code>	<code>is</code>	<code>return</code>
<code>None</code>	<code>continue</code>	<code>for</code>	<code>lambda</code>	<code>try</code>
<code>True</code>	<code>def</code>	<code>from</code>	<code>nonlocal</code>	<code>while</code>
<code>and</code>	<code>del</code>	<code>global</code>	<code>not</code>	<code>with</code>
<code>as</code>	<code>elif</code>	<code>if</code>	<code>or</code>	<code>yield</code>
<code>assert</code>	<code>else</code>	<code>import</code>	<code>pass</code>	
<code>break</code>	<code>except</code>	<code>in</code>	<code>raise</code>	

5. There is no length limit for python identifier but not recommended to use too lengthy identifiers

6. if identifiers starts with Underscore(`_`) then it is private

eg. `__a=10`

`_a=10`

7. if identifiers starts with double underscore(`__`) then it is strongly private identifier

eg. `__a=10`

8. if identifier starts and ends with double underscore symbols then the identifier is language defined special name, which is also known as magic methods.

eg. `add(+)`

Datatypes

Text type- `Str`

Numeric type- `int`, `float`

sequence type- `list`, `tuple`, `range`

mapping type- `dict`

set types- `set`, `frozenset`

boolean type- `bool`

```
In [22]: # *str
s1='Arman'

s1="Arman"
```

```
s1="""Armaan python"""

a="python"

print (a)
print(type(a))
```

```
python
<class 'str'>
```

```
In [23]: # 1.)int
x=1
y=3456789
z=-3230584
print(type(x))
```

```
<class 'int'>
```

```
In [24]: # *binary
a=0b1111 # or 0B1111
print(a)
```

```
15
```

b=0b123

print(b):This gives syntax error as it is not a binary number

```
In [26]: # *octal
x=0o112
print(x)
```

```
74
```

```
In [27]: x=0o1111
print(x)
```

```
585
```

```
In [28]: # *hex
p=0xABCD #or 0XABCD
print(p)
```

```
43981
```

Base conversion

1.bin()

```
In [37]: print(bin(15))
print(bin(0o11))
print(bin(0x12))
bin(15)
```

```
0b1111
0b1001
0b10010
```

```
Out[37]: '0b1111'
```

```
In [33]: print(bin(15))
```

```
0b1111
```

2.oct()

3.hex()

```
In [39]: print(oct(15))
```

```
0o17
```

```
In [ ]:
```