

Fundamental (Basic) Datatypes

In [2]:

```
x=20 # int variable
print(x)
print(id(x))# address of variable
print(type(x)) # type of variable class
```

```
20
140735144564104
<class 'int'>
```

In [5]:

```
# binary data

n=0b100 # default value is decimal
print(n)
print(bin(n))
print(id(n))
print(type(n))
```

```
4
0b100
140735144563592
<class 'int'>
```

In [6]:

```
# octal data

n=0o1007
print(n)
print(oct(n))
print(id(n))
print(type(n))
```

```
519
0o1007
1678436928080
<class 'int'>
```

In [7]:

```
# hexa decimal data

n=0x1007
print(n)
print(hex(n))
print(id(n))
print(type(n))
```

```
4103
0x1007
1678436928208
<class 'int'>
```

In [8]:

```
hx = 0x1007
print(x)
print("binary :",bin(hx))
print("octal :",oct(hx))
print("hexa decimal :",hex(hx))
print(id(hx))
print(type(hx))
```

```
20
binary : 0b1000000000111
octal : 0o10007
hexa decimal : 0x1007
1678436928720
<class 'int'>
```

In [10]:

```
a = 6.8 #float data type
print(a)
print(id(a))
print(type(a))
```

```
6.8
1678434748880
<class 'float'>
```

In [12]:

```
cmp = 3+6j # complex datatype
print(cmp)
print(cmp.real,cmp.imag) # gives real & imaginary part separately
print(id(cmp))
print(type(cmp))
```

```
(3+6j)
3.0 6.0
1678436929392
<class 'complex'>
```

In [28]:

```
k1 = 3+6.2j # complex datatype
oct_cmp = 0x10065+5j
print(cmp)
print(type(cmp.real)) # type is float
print(type(cmp.imag))
print(type(k1.real))
print(type(k1.imag))
print(oct_cmp.real)
print(type(oct_cmp.real))
print(oct_cmp.imag)
print(type(oct_cmp.imag))
```

```
(3+6j)
<class 'float'>
<class 'float'>
<class 'float'>
<class 'float'>
65637.0
<class 'float'>
5.0
<class 'float'>
```

In [18]:

```
b=True # boolean datatype (True/False)
print(b)
print(id(b))
print(type(b))
```

```
True
140735143094816
<class 'bool'>
```

In [30]:

```
s = "nikhil vishwakarma" # string data type
print(s)
print(id(s))
print(type(s))
```

```
nikhil vishwakarma
1678450690928
<class 'str'>
```

In [31]:

```
s = 'nikhil vishwakarma' # string data type
print(s)
print(id(s))
print(type(s))
```

```
nikhil vishwakarma
1678450694928
<class 'str'>
```

In [32]:

```
s = '''nikhil vishwakarma''' # string data type
print(s)
print(id(s))
print(type(s))
```

```
nikhil vishwakarma
1678438175072
<class 'str'>
```

In [33]:

```
s = """nikhil vishwakarma""" # string data type
print(s)
print(id(s))
print(type(s))
```

```
nikhil vishwakarma
1678450701008
<class 'str'>
```

In [35]:

```
# multi line string is allowed in python
poem = """twinkle twinkle little star
how i wonder what you are
up above the sky"""

print(poem)
```

```
twinkle twinkle little star
how i wonder what you are
up above the sky
```

In []: