Unit : 1 Intro to Python

Identifier

- A name in python program is called identifier
- Class name , Function Name , Module Name , Variable name 1) The only allowed Characters in python are -alphabet (A-Z , a-z) -digit(0-9) -underscode Symbol (_) -eg.
  - cash=100 OK
  - ca$h=100 SyntaxError: invalid syntax

2) Identifier Should not Start with Digit

- eg.
  - total123=111
  - 123total=111 SyntaxError: invalid syntax

3) Identifier are case sensitive

- eg.
  - total=111
  - Total=111
  - TOTAL=111

4) Identifier canot use as reserve key

- eg.
  - def=111 SyntaxError: invalid syntax
  - Def=11

and	else	in	return
as	except	is	True
assert	finally	lambda	try
break	false	nonlocal	with
class	for	None	while
continue	from	not	yield
def	global	or	
del	if	pass	
elif	import	raise	

5) There is no Length limit for python identifier but not recommended to use too lengthy

- eg.
  - a=10 good
  - xyz_pqr_abc=10 bad

6) if Identifiers Start with underscore(_) then the it is private identifier

- eg.
  - _a=10

7) if Identifiers Start with 2 underscore(__) then the it is Strong private identifier

- eg.
  - __a=10

8) if Identifiers Start and ends with a underscore(_) then the identifier is language defined special name , which is also known as magic methods

- eg.
  - *a*=10

Datatype

- Text Type - Str
- Numeric Type - int , float , complex
- Sequence Type - list , tuple , range
- mapping Type - dict
- Set Type - set , frozenset
- Boolean Type - bool

String str

- s1='Dixit'
- s1="Dixit"
- s1='''Dixit'''
- s1="""Dixit""" print(type(s1))

int

- x=1
- y=29382932
- z=-56345
- print(type(x))

Number System

Binary

- a=0b1111 or 0B1111
- c=0b123 SyntaxError: invalid digit '2' in binary literal

Octal

- x=0o112 or 0O 112
- x=0o118 SyntaxError: invalid digit '8' in octal literal

hexadecimal

- p=0x11 or 0X111

Base coverstion

1) bin()

- bin(15)
- bin(0o 15) **2) oct()**
- oct(20)
- oct(0b110)

3) hex()

- hex(0b110)

In [ ]:

In [30]:
```
print(bin(0o11))
```

```
0b1001
```