

Day Objectives

- keywords
- variable
- datatypes
- type conversions

In [1]:

```
1 import keyword
2 print(keyword.kwlist)
```

...

In [2]:

```
1 import keyword
2 print(len(keyword.kwlist))
```

35

In [3]:

```
1 a = 78
2 print(a)
```

78

In [4]:

```
1 a1,b1 = 7,8
2 print(a1,b1)
```

7 8

In [5]:

```
1 a=b=c=6
2 print(a,b,c)
```

6 6 6

In [10]:

```
1 s,g,t = 67,88,23
2 print(s)
3 print(g)
4 print(t)
```

67
23

In []:

```
1 single line comment
2 multiline comment
```

In [11]:

```
1 '''hjghjghj
2 yyutytyuiyiyiuu
3 tyuyuyiuio
4 uiyiuu8oi'''
5 print("hi")
```

hi

datatypes

- int---- 7,8,56,7978656
- float--- 9.7,9.0,6.8
- str- "vanitha","ruthu"
- bool -- True,False

In [12]:

```
1 # integer
2 n = int(input('Enter any number: '))
3 print(n)
```

Enter any number: 78
78

In [13]:

```
1 # float
2 f = float(input('Enter any number: '))
3 f
```

Enter any number: 5.6

Out[13]:

5.6

In [15]:

```
1 # str
2 s = input()
3 s
```

89

Out[15]:

'89'

In [16]:

```
1 s1 = str(input())
2 s1
```

book

Out[16]:

'book'

Type Conversions

```
int - int(variable_name)
float - float(variable_name)
str - str(variable_name)
```

In [18]:

```
1 # integer to float
2 h = 89
3 print(h,type(h))
4 h1 = float(h)
5 print(h1,type(h1))
```

```
89 <class 'int'>
89.0 <class 'float'>
```

In [19]:

```
1 # float to integer
2 f = 7.9
3 print(f,type(f))
4 f1 = int(f)
5 print(f1,type(f1))
```

```
7.9 <class 'float'>
7 <class 'int'>
```

Operators

- Arithmetic :- +,-,/,%,//(floor),power(*)
- Assignment :- =,+=,-=,*=,/=,.....
- Comparision/Relational:- ==,!=,<,>,<=,>=
- Logical:- and,or,not
- Bitwise:- &,&,(xor),<<,>>
- Membership:- in, not in
- Identity:- is,is not

In [22]:

```
1  ## Arithmetic
2  a,b = 8,9
3  print(a+b,a-b,a*b)
4  print(a/b,a%b)
```

...

In [26]:

```
1  print(a//b,2**5)
```

0 32

In [28]:

```
1  # Assignment
2  f = 8
3  f += 2 # f=f+2=8+2=10
4  print(f)
```

10

In [29]:

```
1  s = 5
2  s -= f
3  print(s)
```

-5

In [30]:

```
1  d = 7
2  d *= s
3  print(d)
```

-35

In [33]:

```
1  # comparision
2  g,h = 78,22
3  print(g==h)
4  print(g!=h)
5  print(g>h)
6  print(g<h)
7  print(g>=h)
8  print(g<=h)
```

...

In [37]:

```
1 # Logical and
2 g,h = 78,22
3 print(g>h and g==h) # T and F
4 print(g<h and g!=h) # f and t
5 print(g>h and g!=h)
```

...

In [38]:

```
1 # Logical or
2 print(g>h or g==h)
3 print(g<h or g!=h)
4 print(g>h or g!=h)
```

...

In [41]:

```
1 # not
2 print(not(g>h))
3 print(not(g<h))
```

False

True

In [43]:

```
1 ### Bitwise Operators
2 bin(20)
```

Out[43]:

'0b10100'

In [46]:

```
1 a,b=10,20
2 print(a&b)
3 print(a|b)
4 print(a^b)
```

...

In []:

```
1 # Membership Operators: - in, not in
2     These operators are used to check whether a value/character
3     is presented in a sequence or not
4
5     sequence:- str,list,tuple,dict,set
```

In [50]:

```
1 s = "apssdc"
2 print("s" in s)
3 print("d" in s)
4 print("z" in s)
5 print("p" in s)
```

...

In [52]:

```
1 print("s" not in s)
2 print("j" not in s)
3 print("p" not in s)
4 print("y" not in s)
```

...

In [55]:

```
1 print("aps" in s)
2 print("ssp" in s)
3 print("ssdca" in s)
```

True

False

False

In [62]:

```
1 # identity
2 a,b = 7,9
3 print(id(a),id(b))
4 print(a is b)
5 a1,b1=7,7.0
6 print(id(a1),id(b1))
7 print(a1 is b1)
8 print(a is not b)
```

1929824496 1929824528

False

1929824496 99220048

False

True

In []:

1