23/7/25

++ and -- operators demo program

```
a=25
Print(++a) # +(+a)=+a =25
print(a++) # (a+)+=a+.= 25+ throws error
print(a++H) # a+(+H)=a+1=25+1=26
print(--a)  # (-a) = 25
Print(a--)  # Error (a-)-=a+=25+ throws
Print(a+-1)  # Error a(-1) =a+1= 26
Print(-a)    # -25
print(+-a)   #(+(-a) = 25 ) = -25
print(-+a)   # -(+a) = -25
```

semicolon demo program

each line if you semi colon optional we multiply obj is semicolon mandatory

```
print('one');  # one
Print('Two');  # Two
print('three'); # three
print('Hyd'); print('Sec'); print('cyb') # Hyd
                                        Sec
                                        cyb
```

floor() and ceil() functions demo program

```
import math
print(math.floor(10.8))  #10
print(math.ceil(10.8))   # 11
print(math.floor(25.0))  # 25
```

```
print(math.ceil(25.0)) #25
print (math.floor(-3.5)) # -4
print (math.ceil (-3.5)) # -3
print (math.floor (-9.0)) # -9
print (math.ceil (-9.0)) # -9
print (~~math.floor(3.5)~~) # ~~3~~ ~~from math import floor,~~
                               Error NO ~~floor~~ ceil function
print (ceil (3.5))           # 4 Error nocell function
```

gcd () function demo program

```
import math
print(math.gcd (12,15)) #3
print(math.gcd(12,18)) #6
print(math.gcd (4,7)) # 1
print (math.gcd (7,7)) # 7
print (math.gcd (-18,-27)) # 9
print (math.gcd (-4,6)) # 2
print (math.gcd (0,7)) # 7
print (math.gcd (3,0)) # 3
print (math.gcd (0,0)) # 0
print (gcd (5,15)) # Error
```

```
print(math.floor(25)) # 25
print(math.ceil (25.1)) # 26
```

abs() function demo program

```
from builtins import abs
print(abs(-35.8))  # 35.8
print(abs(-27))    # 27
print(abs(29.5))   # 29.5
print(abs(32))     # 32
import builtins
print(builtins.abs(-25)) # 25
```

If argument float then float.

max() and min() functions demo program

```
from builtins import max, min
print(max(10.8, 20.6))  # 20.6
print(min(10.8, 20.6, 5.9, 12.3)) # 5.9
print(max(25, 10.8)) # 25
import builtins
print(builtins.max(10,20,30)) # 30
print(builtins.min(10,20,15,5,12)) #5
```

→ Automatically imported

pow() functions demo program

```
from builtins import pow
print(pow(10,-2))   # 0.01 → 10^-2 = 1/100
print(pow(4, pow(3,2))) # 4^9 = 262144
import builtins
print(builtins.pow(2,3)) # (2^3) = 8
print(builtins.pow(-2,-3)) # (-2^-3 = -1/8) = -0.125
```

→ in builtins module and also in math module

Find outputs

How to import KW list # from keyword import kwlist

How to print KW list # print (keyword.kwlist)

How to print number of keywords

print (len (keyword.kwlist)) 35

How to print type of kwlist

print (type (keyword.kwlist)) <class 'list'>

print (keyword.kwlist) # Error

find outputs (Homework)

How to import keyword module

import keyword

How to print kwlist

print (keyword.kwlist)

How to print number of keywords

print (len (keyword.kwlist))

How to print type of kwlist.

print (type (keyword.kwlist))

print (kwlist) # Error