

Day2

Topics:

Comparison operators(==,>,<,<=,>=,!=,)+ (is,is not,in,not in)

Logical operators(and,or,not)

conditional statements(if,if else,if elif,if elif else)

loop(while,for)

statement(break,continue,pass)

In [37]:

```
print(len('mango') == len('avocado')) # False

print(len('mango') != len('avocado')) # True
print(len('mango') < len('avocado')) # True
#print(len('milk') != len('meat'))    # False
#print(len('milk') == len('meat'))    # True
#print(len('tomato') == len('potato')) # True
#print(len('python') > len('dragon')) # False
```

False

True

True

In [90]:

```
'''In this program, we input a number
check if the number is positive or
negative or zero and display
an appropriate message
This time we use nested if statement'''

num = float(input("Enter a number: "))
if num >= 0:
    if num == 0:
        print("Zero")
    else:
        print("Positive number")
else:
    print("Negative number")
```

Enter a number: 20

Positive number

In [92]:

```
for letter in 'Python':  
    if letter == 'h':  
        continue  
    print('Current Letter :',letter)
```

```
Current Letter : P  
Current Letter : y  
Current Letter : t  
Current Letter : o  
Current Letter : n
```

In [2]:

```
print('1 is 1', 1 is 1)
```

```
1 is 1 True
```

Exercise:

Find the length of the text python and convert the value to float and convert it to string

Even numbers are divisible by 2 and the remainder is zero. How do you check if a number is even or not using python?

Use and operator to check if 'on' is found in both 'python' and 'jargon'

"I hope this course is not full of jargon". Use in operator to check if jargon is in the sentence.

Get length and width of a rectangle using prompt. Calculate its area (area = length x width) and perimeter (perimeter = 2 x (length + width))

Get radius of a circle using prompt. Calculate the area (area = pi x r x r) and circumference (c = 2 x pi x r) where pi = 3.14.

In [99]:

```
a="pythn"  
b="jargon"  
if "on" in a and "on" in b:  
    print(True)  
else:  
    print(False)
```

```
False
```

In [94]:

```
a=len("python")  
print(a)  
b=float(a)  
print(b)  
s=str(a)  
print(type(s))
```

```
6  
6.0  
<class 'str'>
```

In [10]:

```
#{https://www.hackerrank.com/challenges/py-hello-world/problem}  
#{https://www.hackerrank.com/challenges/py-if-else/problem}  
#{https://www.hackerrank.com/challenges/python-arithmetic-operators/problem}
```

In [11]:

```
a=list(map(int,input().split(",")))
```

1,2,3

In [12]:

```
print(a)
```

[1, 2, 3]

In [13]:

```
print(type(a[0]))
```

<class 'int'>

In [22]:

```
a=10  
b=10  
print(a i b)
```

False

In [16]:

```
a!=b
```

Out[16]:

True

In [24]:

```
l=[1,2,3]  
a=10  
print(a not in l)
```

True

In [25]:

```
s="abcd"  
a="b"  
print(a in s)
```

True

In [34]:

File "<ipython-input-34-8faf319afb1c>", line 2

```
if a not 10:
    ^
```

SyntaxError: invalid syntax

In [39]:

```
a="abcd"
b="abc"
print(a==b)
```

False

In [41]:

```
a=10
if 10==20:
    print("yes")
else:
    print("done")
```

done

In [60]:

```
age=int(input())
if age>=18:
    print("major")
elif age>11 and age<18:
    pass
else:
    print("child")
```

13

In [67]:

```
#break,continue,pass
a=100
while a!=0:
    print("shopping")
    a-=10
    if a==50:
        a-=20
    else:
        continue
```

shopping
shopping
shopping
shopping
shopping
shopping
shopping
shopping

In [70]:

```
for i in range(1,10+1):
    print(i)
```

1
2
3
4
5
6
7
8
9
10

In [86]:

```
s="abcdef"

for i in range(1,20):
    if i%2==0:
        print("even")
    e
        continue
```

even
even
even
even
even
even
even
even
even
even

In [88]:

```
if 10>5:
    if 10==20:
        print(True)
    else:
        print(False)
```

False

In []:

```
if i%2==0:
    if 2<=x<=5:
        print()
    elif 6<=x<=20:
        print()
    else:
        print()
```