Python Flow Control: Multiple Conditions & Logical Operators

REMINDER: Use Comparison Operators

Operator	Meaning
==	Equal to
!=	No equal to
<	Less than
>	Greater than
<=	Less than or equal to
>=	Greater than or equal to
>, <, >=, <= work only with integer or floating numbers	

Use Logical Operators for multiple conditions

Operator	Meaning
and	**True if all conditions are True**
or	**True if either conditions are True**
not	**True if condition is False**

and Operator –all conditions must be True

if **condition1** and **condition2**:		
condition1 is	**condition2 is**	**Statement is**
True	True	True
True	False	False
False	True	False
False	False	False

or Operator – just one condition must be True

if **condition1** or **condition2**:		
condition1 is	**condition2 is**	**Statement is**
True	True	True
True	False	True
False	True	True
False	**False**	**False**

not Operator

Operator	Evaluates to
not True	False
not False	True

Examples: if, else – multiple conditions

if condition1 and condition2:

    do something here only if condition 1 and condition2 is **True**

else:

    otherwise do something else

```python
maxCredits = int(input("Enter Number of Credits "))


if maxCredits > 15 and maxCredits < 21:
        do something here if both conditions are **True**
 else:
        otherwise, do something else if one condition is **False**
```

**and operator

```
maxCredits = int(input("Enter Number of Credits "))


if (maxCredits > 15) and (maxCredits < 21):
        do something here if both conditions are **True**
 else:
        otherwise, do something else if one condition is **False**



                                              **use ( ) around conditions
```

```python
userName = input("Enter User Name "))
password = input("Enter Password "))

if (username =="chercher") and (password == "123"):
        print("Valid User")
 else:
        print("Invalid Username or Password")
```

```
maxCredits = int(input("Enter Number of Credits "))


if maxCredits > 15 and < 21:
        do something here if both conditions are **True**
 else:
        otherwise, do something else



**What is the ERROR?**
```

```python
pay = float(input("Enter Pay "))
salary = float(input("Enter Salary "))
bonus = int(input("Enter Bonus"))

if pay > salary or bonus == 5000:
        print("Criteria Met")
else:
        print("Criteria Not Met")
```

**or operator

isSunday = True
isHoliday = False

not operator

```python
if not isHoliday:
        print("Please start working it is not a holiday!")
else:
        print("Today is a holiday, Enjoy!")
```