


Aim: SWBAT create if/else conditionals in Python

Do Now

There's no built in \leq block in Snap!. Suppose we wanted to build one. Which **two** of the following Boolean expressions are equivalent to the expression  ?

- ☐ 
- ☐ 
- ☐ 
- ☐ 

Turn and Talk

Analyze the following code. Why will the first statement read out TRUE while the second statement reads out FALSE? How can we make the second statement read out TRUE?

```
1 x = 5
2 print(x > 0 and x < 10)
3
4 n = 25
5 print(n % 2 == 0 or n % 3 == 0)
6
```

```
1 total_weight = int(input('Enter total weight of luggage:'))
2 num_pieces = int(input('Number of pieces of luggage?'))
3
4 if num_pieces != 0 and total_weight / num_pieces > 50:
5     print('Average weight is greater than 50 pounds -> $100 surcharge.')
6
7 print('Luggage check complete.')
8
```

Analyze the following program.

What are some examples of inputted integers that will lead to the user being charged \$100?

What are some examples of inputted integers that will lead to the user not being charged \$100?

Live Coding

Create a program that asks the user for his/her GPA and absences. Pass these two numbers into a function that determines whether the user is eligible to be in the Honor Roll. To be in the honor roll, you need to have over a 3.0 gpa and less than 5 absences.

```
def honorRoll(gpa, absences):  
    if gpa >= 3.0 and absences < 5:  
        print('You are eligible for honor roll')  
    else:  
        print('You are not eligible for honor roll')  
  
gpa = float(input('Enter your GPA'))  
absences = int(input('How many absences do you have?'))  
  
honorRoll(gpa, absences)|
```

Activity

- 1) Create a program that asks the user to enter his age and his height (in inches). Then create a function that determines if the user is eligible to ride on a roller coaster. To ride the roller coaster, you need to be either over the age of 18 or over 60 inches.