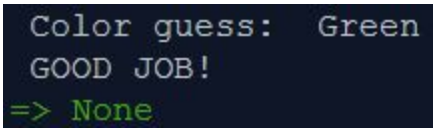
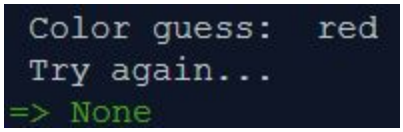
Python – Basics 3 Assignments

1. Create a Python program on repl.it with the title "ColorGuess" In this program, there should be a predetermined 'correct color.' The user should be prompted for his/her guess on what that correct color is. The program should then compare the user input to the correct color and determine if the guess was correct. If so, they program should congratulate them; if not, they should be encouraged to guess again. The colors should not be case sensitive; the program should not care about capital letters.

   Here is an example of the console when the program is finished (the correct color is 'green'):





<Place a screen shot of your code and the output here>

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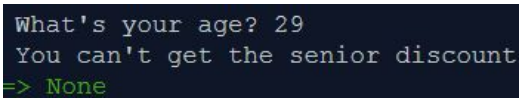
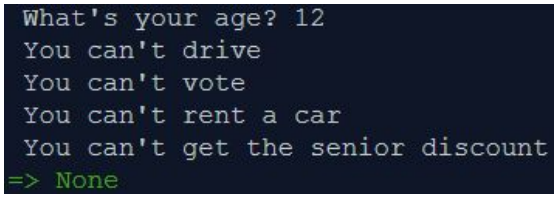
2. Create a Python program on repl.it with the title "MyAge" In this program, the computer should prompt the user for his/her age. Then, depending on the age, the computer should print all of the following statements that apply:
   user is under 3 – "You're a baby"
   user is under 10 – "You have cooties"
   user is under 16 – "You can't drive"
   user is under 18 – "You can't vote"
   user is under 25 – "You can't rent a car"
   user is under 60 – "You can't get senior discounts"
   user is 60 or older – "You're old"

   Here is an example of the console when the program is finished (the age will be different for you):





<Place a screen shot of your code and the output here>

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3. Create a Python program on repl.it with the title "MyAgeAgain" In this program, use your MyAge program as a guide and make a similar one that it only shows the most recent ability that the user as acquired according to the following scale:
   user is under 3 – "You're a baby"
   user is over 3 – "You're not a baby"
   user is over 10 – "You don't have cooties"

user is 16 or over – "You can drive"
user is 18 or over – "You can vote"
user is 25 or over – "You can rent a car"
user is 60 or over – "You can get senior discounts"

THIS PROGRAM CAN BE DONE WITH EITHER IF-ELSE-IF STRUCTURES OF JUST IF STRUCTURES WITH COMPOUND CONDITIONS. IT IS UP TO YOU.

Here is an example of the console when the program is finished (the age will be different for you):

```
What's your age? 17
You can drive
=> None
```

```
What's your age? 2
You're a baby
=> None
```

```
What's your age? 62
You can get the senior discount
=> None
```

<Place a screen shot of your code and the output here>

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4. Create a Python program on repl.it with the title "BasicCalc" In this program, the user will be asked for two numbers and an operation (+ - * / % //). Then, depending on what operation is chosen, the program will do that operation to the two numbers and print out the result in the format shown below. If the operation is entered incorrectly, the program should tell the user "invalid operation". *(for ease of use, deal with all numbers the user chooses as floats)*

   Here is an example of the console when the program is finished (inputs will be different for you):

```
First number:  56
Second number:  47
What do you want to do? (+ - * / % //) -
9.0
=> None
```

```
First number:  9.27
Second number:  2.12
What do you want to do? (+ - * / % //) %
0.79
=> None
```

```
First number:  4
Second number:  3.9
What do you want to do? (+ - * / % //) multiply
invalid operation
=> None
```

<Place a screen shot of your code and the output here>

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5. **CHALLENGE PROBLEM –** Create a Python program on repl.it with the title "iglatinpay". In this program, the program will ask the user for an input word and the program will translate that word to pig Latin (a made up language in which the first letter is moved to the end of a word and then followed by the letters 'ay'). In order to do this, you will need to teach yourself about String Slicing (which can be found HERE). I'm not going to tell you how to do it except to say that you will need to understand string indexing, string length, concatenation & raw_input. No selection structures needed here. THE CODE AND SCREENSHOTS SHOULD BE TURNED IN ON A SEPARATE DOCUMENT CALLED "IGLATINPAY SOLUTION. PUTTING THEM HERE = NO CREDIT.

   Example:

```
What is the word? chicken
In pig Latin that's: hickencay
=> None
```