

In [2]: 2%2

Out[2]: 0

In [3]: 3%2

Out[3]: 1

In [4]: 41%40

Out[4]: 1

In [5]: 20%20 #even number

Out[5]: 0

In [6]: 20%2 == 0

Out[6]: True

In [7]: 21 % 2 ==0

Out[7]: False

In [8]: def even\_check(number):  
 result = number % 2 == 0  
 return result

In [9]: even\_check(21)

Out[9]: False

In [10]: even\_check(20)

Out[10]: True

In [11]: def even\_check(number):  
 return number % 2 == 0

In [12]: even\_check(3)

Out[12]: False

In [13]: even\_check(2)

Out[13]: True

In [14]: # RETURN TRUE IF ANY NUMBER IS EVEN INSIDE A LIST

In [18]: def check\_even\_list(num\_list):  
  
 for number in num\_list:  
 if number % 2 ==0:  
 return True  
 else:  
 pass

In [19]: check\_even\_list([1,3,5])

In [20]: check\_even\_list([2,4,5])

Out[20]: True

In [22]: check\_even\_list([2,1,1,1])

Out[22]: True

In [23]: check\_even\_list([1,1,1,2])

Out[23]: True

In [24]: def check\_even\_list(num\_list):  
  
 for number in num\_list:  
 if number % 2 ==0:  
 return True  
 else:  
 pass  
  
 return False

In [25]: check\_even\_list([1,3,5])

Out[25]: False

In [26]: def check\_even\_list(num\_list):  
 # return all the even numbers in a list  
  
 # placeholder variables  
 even\_numbers = []  
  
 for number in num\_list:  
 if number % 2 ==0:  
 even\_numbers.append(number)  
  
 else:  
 pass  
  
 return even\_numbers

In [27]: check\_even\_list([1,2,3,4,5])

Out[27]: [2, 4]

In [28]: check\_even\_list([1,3,5])

Out[28]: []

In [ ]: