

```
In [8]: 1 def lesser_of_two_evens(a,b):
2         if a%2 == 0 and b%2 == 0:
3             if a > b:
4                 result= b
5             elif b > a:
6                 result= a
7             else:
8                 pass
9         else:
10            if a > b:
11                result= a
12            elif b > a:
13                result = b
14            else:
15                pass
16        return result
17
```

```
In [10]: 1 lesser_of_two_evens(2,5)
```

Out[10]: 5

```
In [48]: 1 def animal_crackers(text):
2         letter = text.lower().split()
3         print(letter)
4
5         first = letter[0]
6         second = letter[1]
7
8         if first[0] == second[0]:
9             return True
10        else:
11            False
```

```
In [49]: 1 animal_crackers('Appke ant')
```

['appke', 'ant']

Out[49]: True

```
In [ ]: 1
```

```
In [50]: 1 def myfunc(n1,n2):
2         return n1+n2 == 20 or n1 == 20 or n2 == 20
3
```

```
In [51]: 1 myfunc(10,3)
```

Out[51]: False

```
In [60]: 1 def old_macdonald(name):
2         first = name[0]
3         between = name[1:3]
4         second = name[3]
5         rest = name[4:]
6         return first.upper()+between+second.upper()+rest
```

```
In [62]: 1 old_macdonald("nannfsdjkdvsdkdj")
```

```
Out[62]: 'NaNNfsdjkdvsdkdj'
```

```
In [80]: 1 def master_yoda(text):
2         word_list = text.split()
3         vulta_list = word_list[::-1]
4         return ''.join(vulta_list)
```

```
In [81]: 1 master_yoda('Nithin Sai Reddy')
```

```
Out[81]: 'ReddySaiNithin'
```

```
In [92]: 1 def almost_there(n):
2         return (100-n) <= 10 or (200-n) <= 10
```

```
In [93]: 1 almost_there(92)
```

```
Out[93]: True
```

```
In [96]: 1 def almost_there(n):
2         return (abs(100-n) <= 10) or (abs(200-n) <= 10)
```

```
In [97]: 1 almost_there(91)
```

```
Out[97]: True
```

```
In [101]: 1 def has_33(nums):
2         for i in range(0, len(nums)-1):
3
4             if i == 3 and i + 1 == 3:
5                 return True
6         else:
7             return False
```

```
In [102]: 1 has_33([1, 3, 1, 3])
```

```
Out[102]: False
```

```
In [103]: 1 has_33([3, 1, 3])
```

```
Out[103]: False
```

```
In [104]: 1 has_33([1, 3, 3])
```

```
Out[104]: False
```

```
In [113]: 1 def paper_doll(text):
2         word = ''
3         for char in text:
4             word += char*3
5         return word
```

```
In [114]: 1 paper_doll('Mississippi')
```

```
Out[114]: 'MMMiissssssiissssssiipppppiii'
```

```
In [127]: 1 def blackjack(a,b,c):
2         if (a+b+c) <= 21:
3             return a+b+c
4         elif 11 in (a,b,c) and sum(a,b,c) <= 31:
5             return (a+b+c)-10
6         else:
7             return 'BUST'
```

```
In [128]: 1 blackjack(5,6,7)
```

```
Out[128]: 18
```

```
In [129]: 1 blackjack(9,9,9)
```

```
Out[129]: 'BUST'
```

```
In [134]: 1 blackjack(1,11,9)
```

```
Out[134]: 21
```

```
In [136]: 1 def summer_69(arr):
2         total = 0
3         add = True
4
5         for num in arr:
6             while add:
7                 if num != 6:
8                     total += num
9                     break
10            else:
11                add = False
12            while not add:
13                if num != 9:
14                    break
15            else:
16                add = True
17                break
18        return total
19
```

```
In [137]: 1 summer_69([2, 1, 6, 9, 11])
```

Out[137]: 14

```
In [144]: 1 def spy_game(nums):
2         out = [0,0,7,'x']
3         for num in nums:
4             if num == out[0]:
5                 out.pop(0)
6         return len(out)==1
7
```

```
In [145]: 1 spy_game([1,2,4,0,0,7,5])
```

Out[145]: True

```
In [1]: 1 def count_primes(num):
2         primes = [2]
3         if num < 2:
4             return 0
5         x = 3
6         while num >= 2:
7             for y in range(3,x,2):
8                 if y%x == 0:
9                     x += 2
10                    break
11            else:
12                primes.append(x)
13                x += 2
14        print(primes)
15        return len(primes)
16
```

In [2]: 1 count_primes(100)

KeyboardInterrupt

Traceback (most recent call last)

<ipython-input-2-248cdde9552f> in <module>

----> 1 count_primes(100)

<ipython-input-1-d163becfeb2e> in count_primes(num)

```
5     x = 3
6     while num >= 2:
----> 7         for y in range(3,x,2):
8             if y%x == 0:
9                 x += 2
```

KeyboardInterrupt:

```
In [3]: 1 def count_primes(num):
2       primes = [2]
3       x = 3
4       if num < 2: # for the case of num = 0 or 1
5           return 0
6       while x <= num:
7           for y in range(3,x,2): # test all odd factors up to x-1
8               if x%y == 0:
9                   x += 2
10                  break
11           else:
12               primes.append(x)
13               x += 2
14       print(primes)
15       return len(primes)
```

In [4]: 1 count_primes(100)

[2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97]

Out[4]: 25

In []: 1