Digital Batch 2 - Sexy Prime

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1 Sexy Prime

1.1 Any set of two number can be a sexy prime number if the differnce between the two numbers are exactly 6

1.1.1 Example : (5 , 11) and (23 , 29)

1.2 Original Constrains : `Lower Limit - 2;Upper Limit - 1,000,000,000`

2 Input Format : `a b`

2.0.1 Where `a` is the lower limit and `b` is the upper limit

3 Output Format : `n`

3.0.1 Where `n` denotes a numeric value stating the number of sexy prime sets of numbers

4 Example 0:

4.1 Input : `4 40`

4.2 Output : `7`

4.3 Explaination :

4.3.1 Number of sets of sexy prime from 4 to 40 are as follows -

- `( 5 , 11 )`
- `( 7 , 13 )`
- `( 11 , 17 )`
- `( 13 , 19 )`
- `( 17 , 23 )`
- `( 23 , 29 )`
- `( 31 , 37 )`

[1]:
```
import math

def isPrime(n):
    for i in range(2,int(math.sqrt(n))+1):
        if n % i == 0:
```

```
            return False
    return True
```

[2]:
```
inp = list(map(int,input().split()))
a = inp[0]
b = inp[1]
```

```
4 40
```

[3]:
```
def countSexy(a,b):
    count = 0
    if a % 2 == 0:
        a=a+1
    for i in range(a,b-5,2):
        if isPrime(i) and isPrime(i+6):
            count=count+1
    print(count)
```

[4]:
```
countSexy(a,b)
```

```
7
```