

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 difference 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

2.1 Example 0:

2.1.1 Input : 4 40

2.1.2 Output : 7

2.2 Explanation :

2.2.1 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
```

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