```
import math
def valid_pair(a, b):
    n2 = \overline{(a+b)//2}
    n1 = (a-b)//2
    if n1>=0 and n2>=0 and n2>=n1:
        return True
    return False
N, ans = int(input("Alice wants exactly how many candies :")), 0
for i in range(1, int(math.sqrt(N))+1):
    if N%i == 0:
        a, b = i, N//i
        if (a\%2==0 and b\%2==0) or (a\%2 and b\%2):
            if valid_pair(a, b):
                ans += 1
            if i*i != N and valid pair(b, a):
                ans += 1
print("Number of different sets of candy packets that Alice can buy
",ans)
Alice wants exactly how many candies : 1000000
Number of different sets of candy packets that Alice can buy 18
```