

```
1  from itertools import product
2  def F(x1, x2, x3, x4, x5, x6, x7, x8, x9, x10):
3      l1 = ((x1 == x2) or not (x2 == x3) or (x3 == x4)) == 1
4      l2 = ((x3 == x4) and not (x4 == x5) and (x5 == x6)) == 1
5      l3 = ((x5 == x6) or not (x6 == x7) or (x7 == x8)) == 1
6      l4 = ((x7 == x8) and not (x8 == x9) and (x9 == x10)) == 1
7      return l1 and l2 and l3 and l4
8
9  count = 0
10 for x in product([0, 1], repeat = 10):
11     if F(*x):
12         count += 1
13 print(count)
```

```
1      uniq = {25}
2      for _ in range(4):
3          prev = set()
4          for x in uniq:
5              prev.add(x // 2)
6              prev.add(x - 3)
7          uniq = prev
8      print(uniq)
```

Run: main x



/Users/alex/.conda/envs/TestProject1/bin/python /Users/alex/

{0, 1, 2, 3, 4, 5, 6, 8, 13}