

```
In [1]: count = 0
        combi = []
        for i in range(0,10):
            for j in range(0,10):
                for k in range(0,10):
                    if i + j + k == 10:
                        count = count + 1
                        combi.append((i,j,k))
        print(''For 3 digits lock combination, the total of number time
              that the summation of these three digits is 10 are'', count)
        print('These combinations are\n')
        for i,ans in enumerate(combi):
            print('combination:{0:3d} = {1:}'.format(i+1,ans))
```

For 3 digits lock combination, the total of number time
that the summation of these three digits is 10 are 63
These combinations are

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combination: 1 = (0, 1, 9)
combination: 2 = (0, 2, 8)
combination: 3 = (0, 3, 7)
combination: 4 = (0, 4, 6)
combination: 5 = (0, 5, 5)
combination: 6 = (0, 6, 4)
combination: 7 = (0, 7, 3)
combination: 8 = (0, 8, 2)
combination: 9 = (0, 9, 1)
combination: 10 = (1, 0, 9)
combination: 11 = (1, 1, 8)
combination: 12 = (1, 2, 7)
combination: 13 = (1, 3, 6)
combination: 14 = (1, 4, 5)
combination: 15 = (1, 5, 4)
combination: 16 = (1, 6, 3)
combination: 17 = (1, 7, 2)
combination: 18 = (1, 8, 1)
combination: 19 = (1, 9, 0)
combination: 20 = (2, 0, 8)
combination: 21 = (2, 1, 7)
combination: 22 = (2, 2, 6)
combination: 23 = (2, 3, 5)
combination: 24 = (2, 4, 4)
combination: 25 = (2, 5, 3)
combination: 26 = (2, 6, 2)
combination: 27 = (2, 7, 1)
combination: 28 = (2, 8, 0)
combination: 29 = (3, 0, 7)
combination: 30 = (3, 1, 6)
combination: 31 = (3, 2, 5)
combination: 32 = (3, 3, 4)
combination: 33 = (3, 4, 3)
combination: 34 = (3, 5, 2)
combination: 35 = (3, 6, 1)
combination: 36 = (3, 7, 0)
combination: 37 = (4, 0, 6)
combination: 38 = (4, 1, 5)
combination: 39 = (4, 2, 4)
combination: 40 = (4, 3, 3)
combination: 41 = (4, 4, 2)
combination: 42 = (4, 5, 1)
combination: 43 = (4, 6, 0)
combination: 44 = (5, 0, 5)
combination: 45 = (5, 1, 4)
combination: 46 = (5, 2, 3)
combination: 47 = (5, 3, 2)
combination: 48 = (5, 4, 1)
combination: 49 = (5, 5, 0)
combination: 50 = (6, 0, 4)
combination: 51 = (6, 1, 3)
combination: 52 = (6, 2, 2)
combination: 53 = (6, 3, 1)
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combination: 54 = (6, 4, 0)
combination: 55 = (7, 0, 3)
combination: 56 = (7, 1, 2)
combination: 57 = (7, 2, 1)
combination: 58 = (7, 3, 0)
combination: 59 = (8, 0, 2)
combination: 60 = (8, 1, 1)
combination: 61 = (8, 2, 0)
combination: 62 = (9, 0, 1)
combination: 63 = (9, 1, 0)
```