

```

a = 0
b = 0

while b <= 8 :
    b += 1
    a = 1
    while a <= 9 :
        print(f'{a} × {b} = {a*b:<2d}', end = ' ')
        a += 1
        if a == 10:
            break
    print()

```

$1 \times 1 = 1$ $2 \times 1 = 2$ $3 \times 1 = 3$ $4 \times 1 = 4$ $5 \times 1 = 5$ $6 \times 1 = 6$ $7 \times 1 = 7$ $8 \times 1 = 8$ $9 \times 1 = 9$
 $1 \times 2 = 2$ $2 \times 2 = 4$ $3 \times 2 = 6$ $4 \times 2 = 8$ $5 \times 2 = 10$ $6 \times 2 = 12$ $7 \times 2 = 14$ $8 \times 2 = 16$ $9 \times 2 = 18$
 $1 \times 3 = 3$ $2 \times 3 = 6$ $3 \times 3 = 9$ $4 \times 3 = 12$ $5 \times 3 = 15$ $6 \times 3 = 18$ $7 \times 3 = 21$ $8 \times 3 = 24$ $9 \times 3 = 27$
 $1 \times 4 = 4$ $2 \times 4 = 8$ $3 \times 4 = 12$ $4 \times 4 = 16$ $5 \times 4 = 20$ $6 \times 4 = 24$ $7 \times 4 = 28$ $8 \times 4 = 32$ $9 \times 4 = 36$
 $1 \times 5 = 5$ $2 \times 5 = 10$ $3 \times 5 = 15$ $4 \times 5 = 20$ $5 \times 5 = 25$ $6 \times 5 = 30$ $7 \times 5 = 35$ $8 \times 5 = 40$ $9 \times 5 = 45$
 $1 \times 6 = 6$ $2 \times 6 = 12$ $3 \times 6 = 18$ $4 \times 6 = 24$ $5 \times 6 = 30$ $6 \times 6 = 36$ $7 \times 6 = 42$ $8 \times 6 = 48$ $9 \times 6 = 54$
 $1 \times 7 = 7$ $2 \times 7 = 14$ $3 \times 7 = 21$ $4 \times 7 = 28$ $5 \times 7 = 35$ $6 \times 7 = 42$ $7 \times 7 = 49$ $8 \times 7 = 56$ $9 \times 7 = 63$
 $1 \times 8 = 8$ $2 \times 8 = 16$ $3 \times 8 = 24$ $4 \times 8 = 32$ $5 \times 8 = 40$ $6 \times 8 = 48$ $7 \times 8 = 56$ $8 \times 8 = 64$ $9 \times 8 = 72$
 $1 \times 9 = 9$ $2 \times 9 = 18$ $3 \times 9 = 27$ $4 \times 9 = 36$ $5 \times 9 = 45$ $6 \times 9 = 54$ $7 \times 9 = 63$ $8 \times 9 = 72$ $9 \times 9 = 81$

```

import random
b = random.randrange(0, 10, 4)
print(b)
guess = 0
while True:
    a = input('請輸入一個四位數，不准重複：')
    a = a[0]
    b = b[0]
    if len(a) != 4:
        print('輸入數字過多，給我重來！')
    elif len(a) < 4:
        print('輸入數字過少，給我重來！')
    elif len(a) == 4:
        for i in range(0, 4):
            for j in range(0, 4):
                if a[i] == b[j]:
                    if i == j:
                        break
            else:
                break
        print(f'你 {a} 對 {b} ！')
        guess += 1
    if guess == 4:
        print('你猜對了，猜了(guess)次！')
        break

```

[8, 4, 2, 7]
 請輸入一個四位數，不准重複2314
 2314:0A2B
 請輸入一個四位數，不准重複9846
 9846:0A2B
 請輸入一個四位數，不准重複8420
 8420:3A0B
 請輸入一個四位數，不准重複10293
 輸入數字過多，給我重來
 請輸入一個四位數，不准重複111
 輸入數字過少，給我重來
 請輸入一個四位數，不准重複8427
 8427:4A0B
 終於對了，猜了4次