

```
# Import the random module to be able to create a (pseudo) random number.
import random

number = random.randint(1,25)                      # Generate random number
number_of_guesses = 0                                # Instantiate guess counter

while number_of_guesses < 5:
    print('Guess a number between 1 and 25: ')      # Tell user to guess number
    guess = input()                                    # Produce the user input field
    guess = int(guess)                                # Convert guess to integer
    number_of_guesses += 1                            # Increment guess count by 1

    if guess == number:                             # Break while loop if guess is correct
        break
    elif number_of_guesses == 5:                     # Break while loop if guess limit reached
        break

    else:                                         # Tell user to try again
        print(' Nope! Try again.')

# Message to display if correct
if guess == number:
    print('Correct! You guessed the number in ' + str(number_of_guesses) + ' tries!')
# Message to display after 5 unsuccessful guesses
else:
    print('You did not guess the number. The number was ' + str(number) + '.')
```

```
Guess a number between 1 and 25:
4
Nope! Try again.
Guess a number between 1 and 25:
7
Nope! Try again.
Guess a number between 1 and 25:
22
Nope! Try again.
Guess a number between 1 and 25:
7
Nope! Try again.
Guess a number between 1 and 25:
8
You did not guess the number. The number was 23.
```

```
# Use a for loop to calculate 9!
product = 1
for n in range(1, 10):
    product = product * n

print(product)
```

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362880
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```
# Define a function that converts Fahrenheit to Celsius.
def to_celsius(x):
    return (x-32) * 5/9

# Create a table of Celsius-->Fahrenheit conversions every 10 degrees, 0-100
for x in range(0, 101, 10):
    print(x, to_celsius(x))
```

```
0 -17.77777777777778
10 -12.22222222222221
20 -6.66666666666667
30 -1.11111111111112
40 4.44444444444445
50 10.0
60 15.55555555555555
70 21.11111111111111
80 26.66666666666668
90 32.22222222222222
100 37.77777777777778
```

```
candy_purchased = 0
while candy_purchased <= 5:
    print('Candy purchased:' + str(candy_purchased) )
    candy_purchased = candy_purchased + 1
```

Candy purchased:0
Candy purchased:1
Candy purchased:2
Candy purchased:3
Candy purchased:4
Candy purchased:5

```
candy_purchased = 0
while candy_purchased <= 100:
    if candy_purchased % 10 == 0:
        print('Candy purchased:' + str(candy_purchased))
    candy_purchased = candy_purchased + 1
```

Candy purchased:0
Candy purchased:10
Candy purchased:20
Candy purchased:30
Candy purchased:40
Candy purchased:50
Candy purchased:60
Candy purchased:70
Candy purchased:80
Candy purchased:90
Candy purchased:100

```
from time import sleep

mins = 10

while mins >= 0:
    if mins == 5:
        print('Place your reservation soon! 5 minutes remaining.')
    elif mins == 2:
        print('Don\'t lose your seats! 2 minutes remaining.')
    elif mins == 0:
        print('User timed out.')
    else:
        print(mins)
    mins -=1
    sleep(1)
```

```
10
9
8
7
6
Place your reservation soon! 5 minutes remaining.
4
3
Don't lose your seats! 2 minutes remaining.
1
User timed out.
```