```python
limit = int(input("Enter the digit position limit: "))
count = 1    # position tracker

for num in range(1, 1000):      # you can increase this range
    for digit in str(num):      # extract each digit from the number
        if count <= limit:
            print(f"{count}th digit is {digit}")
            count += 1
        else:
            break
    if count > limit:
        break
```

```python
def digit_stream(limit):
    count = 1
    num = 1

    while count <= limit:
        for digit in str(num):
            if count <= limit:
                print(f"{count}th digit is
{digit}")
                count += 1
        num += 1

limit = int(input("Enter limit: "))
digit_stream(limit)
```

```python
def digit_stream(limit):
    count = 1
    num = 1

    while count <= limit:
        for digit in str(num):
            if count <= limit:
                print(f"{count}th digit is {digit}")
                count += 1
        num += 1

limit = int(input("Enter limit: "))
digit_stream(limit)
```

```python
def digit_generator():
    num = 1
    while True:
        for digit in str(num):
            yield digit
        num += 1

limit = int(input("Enter digit count: "))
gen = digit_generator()

for i in range(1, limit+1):
    print(f"{i}th digit is {next(gen)}")
```