In [1]:
```
#Prime Number Generator
def prime_num_generator():
    num=2
    while True:
        for i in range(2,int(num**0.5)+1):
            if num%i==0:
                break
        else:
            yield num
        num+=1

gen=prime_num_generator()
for _ in range(15):
    print(next(gen), end =" ")
```

```
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47
```

In [2]:
```
#Temperature Simulator with 1 second delay
import random
import time
def temperature_simulator():
    while True:
        yield random.uniform(-10,35)
gen=temperature_simulator()
for _ in range(10):
    print(f"the temperatre value {next(gen)}.2f")
    time.sleep(1)
```

```
the temperatre value 21.113141481572264.2f
the temperatre value 30.58357067172456.2f
the temperatre value 26.92357566880448.2f
the temperatre value -0.44733644150691454.2f
the temperatre value 33.05759150443406.2f
the temperatre value 23.583438773803472.2f
the temperatre value 25.897522863569215.2f
the temperatre value -2.9224371630868893.2f
the temperatre value -5.292589960411855.2f
the temperatre value 8.320712756562624.2f
```

In [8]:
```
#
def fibonacci_generator():
    a, b = 0, 1
    while True:
        yield a
        a, b = b, a + b

gen = fibonacci_generator()
for _ in range(n)):
    sum(next(gen)

# Sum of first 10 Fibonacci numbers
print("Sum of first 10 Fibonacci numbers:", sum_fibonacci(10))
```

```
Sum of first 10 Fibonacci numbers: 88
```

In [1]:
```
def filter_strings(data):
    for item in data:
        if isinstance(item, str):
```

```
            yield item

# Sample data
mixed_data = [1, "hello", 3.14, "world", 42]

# Print only strings
for string in filter_strings(mixed_data):
    print(string)
```

```
hello
world
```

In [ ]:

In [ ]: