```
import sympy as smp
print(f'sympy={smp.__version__}')
```

```
sympy=1.13.1
```

```
x = smp.symbols('x')
f = (2/(x + 6))/((4 / (x - 6)) - (4 / (x**2 - 36)))
display(f)
display(f.simplify())

print(f'f(7)={f.subs({x: 7})}')
print(f'f(9.37)={f.subs({x: 9.37})}')
print(f'f(7.35)={f.subs({x: 7.35}):.2f}')
```

$$\frac{2}{(x+6)\left(-\frac{4}{x^2-36}+\frac{4}{x-6}\right)}$$

$$\frac{x-6}{2(x+5)}$$

```
f(7)=1/24
f(9.37)=0.117258176757133
f(7.35)=0.05
```

```
# Python 購物車程式
# list, set, tuple
goods = []
prices = []
while 1: #1
    good = input("輸入想購買的商品(輸入 q 離開):")
    if good.lower() == "q":  #2
        break
    price = float(input(f"請輸入{good}的價格:"))  #3
    goods.append(good)
    prices.append(price)

for 編號, 商品 in enumerate(goods):  #4
    print(f"第{編號 + 1}個商品是{商品}，價格:{prices[編號]:.1f}")
    price_total = sum(prices)
    print(f"總價格為:{price_total}元")
```

```
輸入想購買的商品(輸入 q 離開):123
請輸入123的價格:4
第1個商品是123，價格:4.0
總價格為:4.0元
輸入想購買的商品(輸入 q 離開):q
```