Q1:- Write a program that will tell the number of dogs and chicken are there when the user will provide the value of total heads and legs.

For example: Input: heads -> 4 legs -> 12

Output: dogs -> 2 chicken -> 2

In [ ]:
```
# You entered heads: 4 and legs: 12
# ----------------------------------------
# Number of dogs: 2.0
# Number of cats: 2.0

heads = int(input("Enter Total Heads : "))
legs = int(input("Enter Total Legs : "))

dogs = (legs - 2 * heads) // 2
chicken = heads - dogs

print(f"Number of Dogs : {dogs}")
print(f"Number of Chickens: {chicken}")
```

Q2:- Given 2 fractions, find the sum of those 2 fractions.Take the numerator and denominator values of the fractions from the user.

In [ ]:
```
n1 = int(input("Enter numerator of first number: "))
d1 = int(input("Enter denominator of first number: "))
n2 = int(input("Enter numerator of second number: "))
d2 = int(input("Enter denominator of second number: "))

n = (n1*d2) + (n2*d1)
d = d1 * d2
print(f"{n1}/{d1} + {n2}/{d2} = {n}/{d}")
```

```
2/5 + 3/7 = 29/35
```

Q3:- Given the height, width and breadth of a milk tank, you have to find out how many glasses of milk can be obtained? Assume all the inputs are provided by the user.

Input:

Dimensions of the milk tank

H = 20cm, L = 20cm, B = 20cm

Dimensions of the glass

h = 3cm, r = 1cm

In [ ]:
```
height = int(input("Enter Height : "))
width = int(input("Enter Width : "))
breadth = int(input("Enter Breadth : "))
h = int(input("Enter Height OF Glass : "))
r = int(input("Enter Height OF Radius : "))
```

```
print(f"Volume of tank in cubic cm: {height * width * breadth}")
print(f"Volume of glass in cubic cm: {3.14 * r * r * h}")
print(f"Number of glasses to fill the tank: {(height * width * breadth)/(3.14 *
```

```
Volume of tank in cubic cm: 8000
Volume of glass in cubic cm: 9.42
Number of glasses to fill the tank: 849.2569002123142
```