In [29]:

```python
# # Q1) Declaring an float value and storing it in a variable. Checking the type and printi

# num1=10.0
# print(type(num1))
# print(id(num1))

# Take two different float values.
# Store them in two different variables.

a = float(input("Enter first number: "))
b = float(input("Enter Second number: "))

c = a+b
print(f"The sum of two numbers is {c}")

c = a-b
print(f"The difference of two numbers is {c}")

c = a*b
print(f"The product of two numbers is {c}")

c = a/b
print(f"The division of two numbers is {c}")

c = a%b
print(f"The remainder of two numbers is {c}")

c = a//b
print(f"The quotient of two numbers is {c}")

c = a**b
print(f"The division of two numbers is {c}")

# Comparison Operators on float

print(a>b)      #True
print(a<b)     #False
print(a>=b)    #True
print(a<=b)    #False

print(a==b)
print(a!=b)

print(10.20 and 20.30)
print(0.0 and 20.30)
print(20.30 and 0.0)
print(0.0 and 0.0)

print(10.20 or 20.30)
print(0.0 or 20.30)
print(20.30 or 0.0)
print(0.0 or 0.0)

print(not 10.20)
print(not 0.0)

a = 10.20
b = 10.20
```

```python
print(id(a))          ## Reusability concept works with integer and not float
print(id(b))

print(a is b)
print(a is not b)

#  Membership operation

print('2.7' in 'Python2.7.8')
print(10.20 in [10,10.20,10+20j,'Python'])
print(10.20 in (10,10.20,10+20j,'Python'))
print(20.30 in {1,20.30,30+40j})
print(2.3 in {1:100, 2.3:200, 30+40j:300})
print(10 in range(20)) # True
```

```
Enter first number: 25
Enter Second number: 6
The sum of two numbers is 31.0
The difference of two numbers is 19.0
The product of two numbers is 150.0
The division of two numbers is 4.166666666666667
The remainder of two numbers is 1.0
The quotient of two numbers is 4.0
The division of two numbers is 244140625.0
True
False
True
False
False
True
20.3
0.0
0.0
0.0
10.2
20.3
20.3
0.0
False
True
2162812043376
2162839195696
False
True
True
True
True
True
True
True
```

```python
In [ ]:
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