a. What does Eden like?
X = coffee
?- likes(eden, X).
b. Who likes Shila?
X = shekhar
?- likes(X, shila).
c. What is red?
X = roses
?- color(X, red).
d. Who owns gold?
X = luke
?- owns(X, gold).
e. Who is a girl?
X = simran
?- girl(X).
f. Is Shilu wealthy?
true
<pre>?- wealthy(shilu).</pre>
g. What do Pratima own?
false
?- owns(pratima, X).

ADDITION

```
addition(5, 3, Result).
```

Result = 8

?- addition(5, 3, Result).

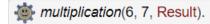
SUBTRACTION

```
subtraction(10, 4, Result).
```

Result = 6

?- subtraction(10, 4, Result).

MULTIPLICATION



Result = 42

?- multiplication(6, 7, Result).

DIVISION

```
division(20, 5, Result).
```

Result = 4

?- division(20, 5, Result).

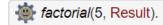
MODULO

```
modulo(15, 4, Result).
```

Result = 3

?- modulo(15, 4, Result).

FACTORIAL OF 5



Result = 120

?- factorial(5, Result).

FACTORIAL OF 12

factorial(12, Result).

Result = 479001600

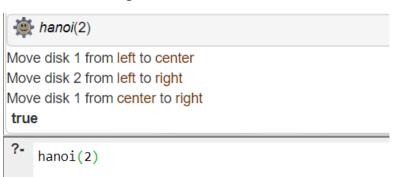
?- factorial(12, Result).

Some conflict checks..

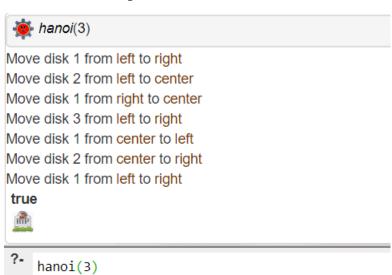
```
conflict(a).
false
?- conflict(a).
conflict(b).
true
   conflict(b).
conflict(Which).
Which = b
   conflict(Which).
conflict(R1,R2,b).
R1 = 2,
R2 = 4
    conflict(R1,R2,b).
conflict(R1,R2,b),color(R1,C,b).
C = blue,
R1 = 2,
R2 = 4
```

conflict(R1,R2,b),color(R1,C,b).

Tower of Hanoi problem for 2 disks



Tower of Hanoi problem for 2 disks



The temperature of 101 degrees Celsius to Fahrenheit.



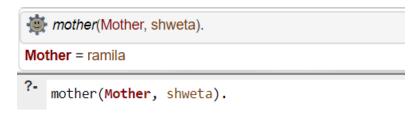
The temperature of 89.9 degrees Celsius to Fahrenheit.

```
celsius_to_fahrenheit(89.9, Fahrenheit).

Fahrenheit = 193.82
Predicate defined in line 2

?- celsius_to_fahrenheit(89.9, Fahrenheit).
```

1. Who is the mother of Shweta?



2. Who is the grandmother of Shekhar?



3. Who are the parents of James?

```
parent(Parent, james).

Parent = roman
Parent = shila

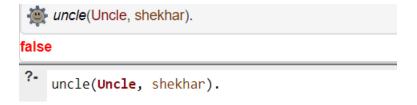
?- parent(Parent, james).
```

4. Does Shila have a sister?

```
sibling(shila, Sister).
false

?- sibling(shila, Sister).
```

5. Who is the uncle of Shekhar?



6. Find all ancestors of Simon.

```
ancestor(Ancestor, simon).

Ancestor = mani
Ancestor = anu
Ancestor = bikash
Ancestor = ramila
false

?- ancestor(Ancestor, simon).
```