

```
% library(win_menu) compiled into win_menu 0.00 sec, 33 clauses
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```

For help, use `?- help(Topic).` or `?- apropos(Word).`

```
1 ?- consult('crypto.pro').
```

```
% c:/Users/joshu/Documents/CSC366/Assignments/sets/combosets.pro compiled 0.00 sec, 38 clauses
```

```
% c:/Users/joshu/Documents/CSC366/Assignments/assignment03/gv2.pro compiled 0.00 sec, 20
clauses
```

```
% c:/Users/joshu/Documents/CSC366/Assignments/crypto/v1/crypto.pro compiled 0.00 sec, 34 clauses
```

```
% c:/Users/joshu/Documents/CSC366/Assignments/sets/combosets.pro compiled 0.00 sec, 1 clauses
```

```
% c:/Users/joshu/Documents/CSC366/Assignments/crypto/v3/crypto.pro compiled 0.00 sec, 19 clauses
```

```
% crypto.pro compiled 0.02 sec, 114 clauses
```

```
true.
```

```
2 ?- solve(random).
```

```
Problem : numbers = {1, 4, 14, 12, 15} Goal = 6
```

```
Solution: ( ( 14 + 12 ) - ( 15 + ( 1 + 4 ) ) )
```

```
true .
```

```
3 ?- solve(random).
```

```
Problem : numbers = {9, 0, 1, 3, 0} Goal = 5
```

```
Solution: ( ( 0 + ( 9 + 0 ) ) - ( 1 + 3 ) )
```

```
true .
```

4 ?- solve(random).

Problem : numbers = {3, 13, 2, 15, 8} Goal = 6

Solution: ((2 * 15) - (8 + (3 + 13)))

true .

5 ?- solve(numbers(2,3,5,7,11),goal(13)).

ERROR: Syntax error: Operator expected

ERROR: solve(numbers(2,3,5,7,11),goal(13)

ERROR: ** here **

ERROR: .

5 ?- solve(numbers(2,3,5,7,11),goal(13)).

Problem : numbers = {2, 3, 5, 7, 11} Goal = 13

Solution: (11 + ((5 + 7) / (2 * 3)))

true .

6 ?- solve(numbers(5,13,11,1,4),goal(11)).

Problem : numbers = {5, 13, 11, 1, 4} Goal = 11

Solution: ((4 + (5 + 13)) - (11 * 1))

true .

7 ?- demo(10).

Problem : numbers = {0, 9, 10, 4, 2} Goal = 2

Solution: ((10 + 4) / ((0 + 9) - 2))

Problem : numbers = {12, 8, 15, 1, 11} Goal = 9

Solution: ((15 * (1 + 11)) / (12 + 8))

Problem : numbers = {5, 3, 14, 1, 1} Goal = 1

Solution: ((5 + 3) - (14 / (1 + 1)))

Problem : numbers = {1, 10, 4, 4, 6} Goal = 11

Solution: ((4 * 4) + (6 - (1 + 10)))

Problem : numbers = {10, 6, 6, 1, 7} Goal = 10

Solution: $((6 + 1) + (7 - (10 - 6)))$

Problem : numbers = {14, 13, 7, 15, 11} Goal = 0

Solution: $((15 + 11) - ((14 * 13) / 7))$

Problem : numbers = {3, 3, 1, 0, 9} Goal = 5

Solution: $((0 * 9) - (1 - (3 + 3)))$

Problem : numbers = {1, 0, 0, 9, 13} Goal = 5

Solution: $((13 + (1 + 0)) - (0 + 9))$

Problem : numbers = {3, 5, 4, 13, 7} Goal = 8

Solution: $((7 - (3 + 5)) - (4 - 13))$

Problem : numbers = {8, 7, 8, 3, 9} Goal = 0

Solution: $((9 + (8 + 7)) - (8 * 3))$

true .

8 ?- halt.