

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q1.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- print_list([a,b,c]).  
a b c  
true.
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
E:\halit1
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q2.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

For online help and background, visit <https://www.swi-prolog.org>  
For built-in help, use ?- help(Topic). or ?- apropos(Word).

```
1 ?- reverse([1,2,3],X).
X = [3, 2, 1] .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05>
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q3.pl
```

```
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
```

```
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
```

```
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
```

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

```
1 ?- create_list(5,12,S).
```

```
S = [5, 6, 7, 8, 9, 10, 11, 12] .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q4.pl
```

```
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
```

```
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
```

```
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
```

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

```
1 ?- mean([1,2,3,4,5],S).
```

```
S = 3.
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q5.pl
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q5.pl:2:
Warning:    Singleton variables: [T]
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q5.pl:3:
Warning:    Singleton variables: [X]
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

For online help and background, visit <https://www.swi-prolog.org>  
For built-in help, use ?- help(Topic). or ?- apropos(Word).

```
1 ?- numberinlist([a,b,c,1,d]).  
true .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q6.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

For online help and background, visit <https://www.swi-prolog.org>  
For built-in help, use ?- help(Topic). or ?- apropos(Word).

```
1 ?- increment([1,2,3],[4,5,6]).  
false.
```

```
2 ?- increment([1,2,3],[2,3,4]).  
true.
```

```
3 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q7.pl
ERROR: e:/vs code/iii-i-lab/tdpl/lab-05/q7.pl:6:
ERROR:      No permission to modify static procedure `halt/0'
ERROR:      Defined at c:/program files/swipl/boot/init.pl:4396
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

For online help and background, visit <https://www.swi-prolog.org>  
For built-in help, use ?- help(Topic). or ?- apropos(Word).

```
1 ?- factorial(5,X).
X = 120 .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q8.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- appendx([1,2,3,4],[5,6,7,8],S).
S = [1, 2, 3, 4, 5, 6, 7, 8].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q9.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- encapsulate([1,2,3,4,5],S).
S = [[1], [2], [3], [4], [5]].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q10.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- insert_zeros([1,2,3],S).
S = [1, 0, 2, 0, 3, 0].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q11.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- clone_list([1,2,3],S).
S = [[1, 2, 3], [1, 2, 3]].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q12.pl
```

```
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q12.pl:1:
```

```
Warning: Singleton variables: [N,X]
```

```
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q12.pl:2:
```

```
Warning: Singleton variables: [H]
```

```
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
```

```
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
```

```
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
```

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

```
1 ?- modify_list([1,2,a],2,3,S).
```

```
S = [1, 2, 3] .
```

```
2 ?- rotate_list([1,2,3,4],S).
```

```
S = [2, 3, 4, 1] .
```

```
3 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05>
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q13.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- fib(7,F).
F = 13 .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q15.pl
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q15.pl:15:
Warning: Singleton variables: [N]
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

For online help and background, visit <https://www.swi-prolog.org>  
For built-in help, use ?- help(Topic). or ?- apropos(Word).

```
1 ?- square_matrix_rand(4,S).
S = [[9, 8, 3, 3], [6, 8, 1, 4], [4, 6, 1, 3], [6, 8, 3, 4]] .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05>
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q16.pl
```

```
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q16.pl:1:
```

```
Warning: Singleton variables: [T]
```

```
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q16.pl:2:
```

```
Warning: Singleton variables: [X]
```

```
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
```

```
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
```

```
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
```

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

```
1 ?- memberx(2,[1,2,3]).
```

```
true .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05>
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q17.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- insertinto(3,[1,2,4,5],S).
S = [1, 2, 3, 4, 5].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q18.pl
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q18.pl:1:
Warning: Singleton variables: [T]
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q18.pl:2:
Warning: Singleton variables: [X]
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q18.pl:3:
Warning: Singleton variables: [N]
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

For online help and background, visit <https://www.swi-prolog.org>  
For built-in help, use ?- help(Topic). or ?- apropos(Word).

```
1 ?- delete_dupl([1,1,2,3,3,3,4],S).
S = [2, 4] .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05>
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q19.pl
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q19.pl:1:
Warning:   Singleton variables: [T]
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q19.pl:2:
Warning:   Singleton variables: [X]
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q19.pl:5:
Warning:   Singleton variables: [H]
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

For online help and background, visit <https://www.swi-prolog.org>  
For built-in help, use ?- help(Topic). or ?- apropos(Word).

```
1 ?- delete_unique([1,1,2,3,3,3,4],S).
S = [1, 3, 3].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05>
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q20.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- make_unique([1,2,2,3,3,3,4,4,4],S).
S = [1] .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05>
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q21.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- quicksort([2,1,4,7,5],S).
S = [1, 2, 4, 5, 7] .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q22.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- merge([1,3,5],[2,4,6],S).
S = [1, 2, 3, 4, 5, 6] .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q23.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- add_up_list([1, 2, 3, 4],S).
S = [1, 3, 6, 10].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q24.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- sumlist([1,2,3,4],S).
S = 10.
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q25.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- occurs([1,2,3,4],2,S).
S = 2 .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05>
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q26.pl
```

```
ERROR: e:/vs code/iii-i-lab/tdpl/lab-05/q26.pl:1:
```

```
ERROR:      No permission to modify static procedure `length/2'
```

```
ERROR:      Defined at c:/program files/swipl/boot/init.pl:4223
```

```
ERROR: e:/vs code/iii-i-lab/tdpl/lab-05/q26.pl:2:
```

```
ERROR:      No permission to modify static procedure `length/2'
```

```
ERROR:      Defined at c:/program files/swipl/boot/init.pl:4223
```

```
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
```

```
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
```

```
Please run ?- license. for legal details.
```

For online help and background, visit <https://www.swi-prolog.org>

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

```
1 ?- length([1,2,3],S).
```

```
S = 3.
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q27.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- occurrences(2,[1,2,2,3,3,3],S).
S = 2 .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05>
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q28.PL
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- reverse([a,b,c],S).
S = [c, b, a].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q29.PL
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- nth(3,[a,b,c,d,e],S).
S = c .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05>
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q30.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- remove_nth(3,[1,2,3,4,5],S).
```

```
S = [1, 2, 4, 5] .
```

```
2 ?- insert_nth(3,3,[1,2,4,5],S).
```

```
S = [1, 2, 3, 4, 5] .
```

```
3 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q31.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- reverse([1,2,3],S).
S = [3, 2, 1].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q32.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- contains_number([a,b,c,d,1]).  
true.
```

```
2 ?- contains_number([a,b,c,d]).  
false.
```

```
3 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q33.pl
```

```
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
```

```
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
```

```
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
```

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

```
1 ?- increment([1,2,3],S).
```

```
S = [2, 3, 4].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q34.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- factorial(6,S).
S = 720 .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> |
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q35.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- append([1,2,3],[a,b,c],S).
S = [1, 2, 3, a, b, c].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q36.pl
```

```
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
```

```
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
```

```
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
```

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

```
1 ?- encapsulate([1,2,3],S).
```

```
S = [[1], [2], [3]].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q37.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- insert_zeros([1,2,3],S).
S = [1, 0, 2, 0, 3, 0].
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q38.pl
```

```
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q38.pl:1:
```

```
Warning: Singleton variables: [N,X]
```

```
Warning: e:/vs code/iii-i-lab/tdpl/lab-05/q38.pl:2:
```

```
Warning: Singleton variables: [H]
```

```
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
```

```
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
```

```
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
```

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

```
1 ?- modify_list([1,2,3],2,4,S).
```

```
S = [1, 2, 4] .
```

```
2 ?- modify_list([1,2,3],5,6,S).
```

```
S = [1, 2, 3].
```

```
3 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q39.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- fib(10,N).
N = 55 .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> swipl -s Q40.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.7)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

```
For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).
```

```
1 ?- max1([1,-2,3],S).
S = 3 .
```

```
2 ?- halt.
```

```
PS E:\VS CODE\III-I-LAB\TDPL\LAB-05> █
```