

## Program 17

### Sum of integers from 1 to n

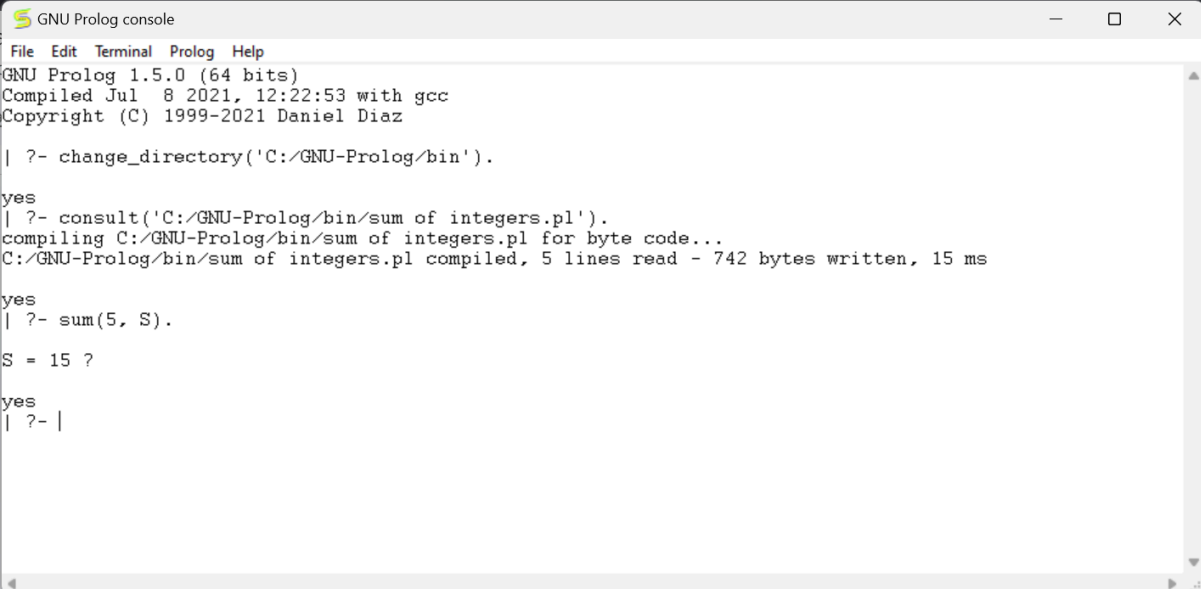
#### AIM :

To implement a prolog program to print the sum of integers from 1 to n.

#### PROGRAM :

```
sum(0, 0).  
sum(N, R) :-  
    N1 is N - 1,  
    sum(N1, R1),  
    R is R1 + N.
```

#### OUTPUT:



```
GNU Prolog console  
File Edit Terminal Prolog Help  
GNU Prolog 1.5.0 (64 bits)  
Compiled Jul  8 2021, 12:22:53 with gcc  
Copyright (C) 1999-2021 Daniel Diaz  
  
| ?- change_directory('C:/GNU-Prolog/bin').  
yes  
| ?- consult('C:/GNU-Prolog/bin/sum of integers.pl').  
compiling C:/GNU-Prolog/bin/sum of integers.pl for byte code...  
C:/GNU-Prolog/bin/sum of integers.pl compiled, 5 lines read - 742 bytes written, 15 ms  
yes  
| ?- sum(5, S).  
S = 15 ?  
yes  
| ?- |
```

#### RESULT:

The Program has successfully been executed.