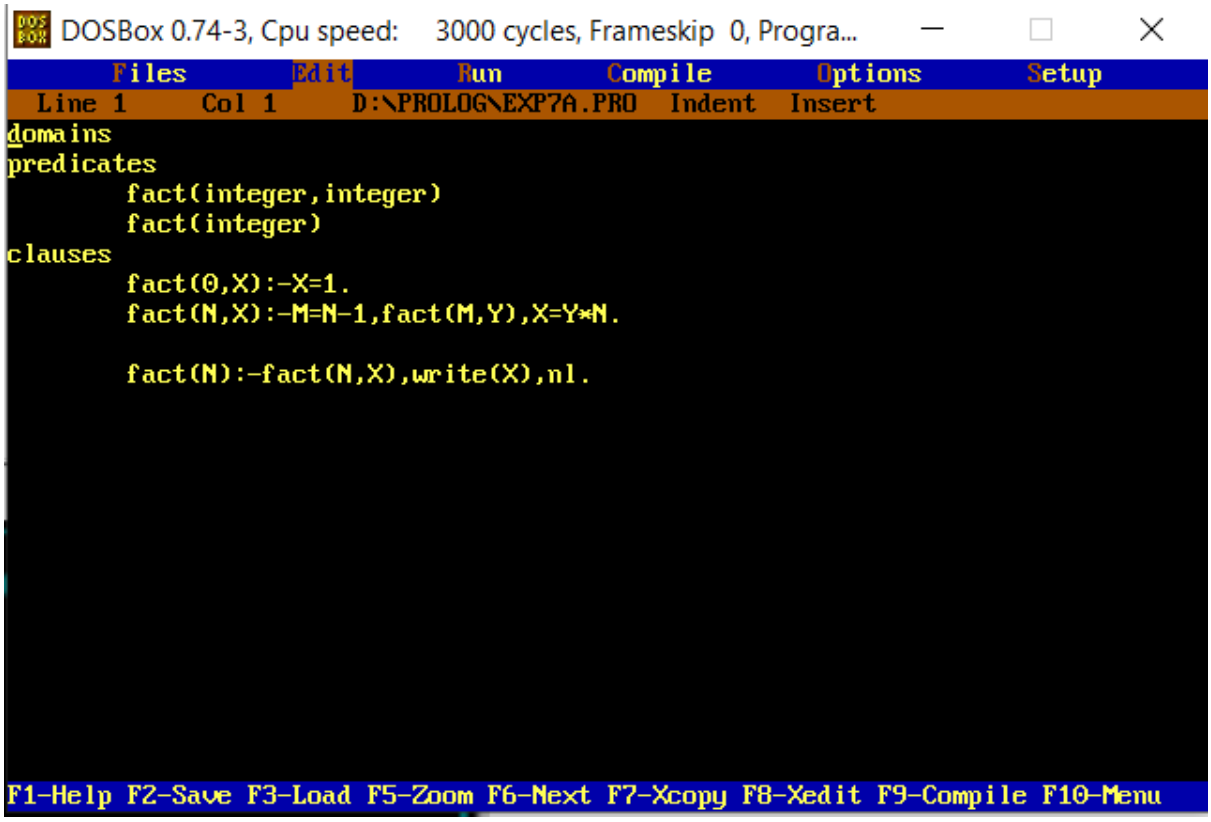
Lab-7 WAP to study Using recursion in prolog.

Procedure:-

Write predicate fact(n) ,which finds and display factorial of a given number .

Example:- Output:- Goal :- fact(5) 5 != 5*4*3*2*1= 120 .

CODE:



domains

predicates

fact(integer,integer)

fact(integer)

clauses

fact(0,X):-X=1.

fact(N,X):-M=N-1,fact(M,Y),X=Y*N.

fact(N):-fact(N,X),write(X),nl.

OUTPUTS:

Write predicate fibbonacci (n) ,which finds the series for first “n” values .

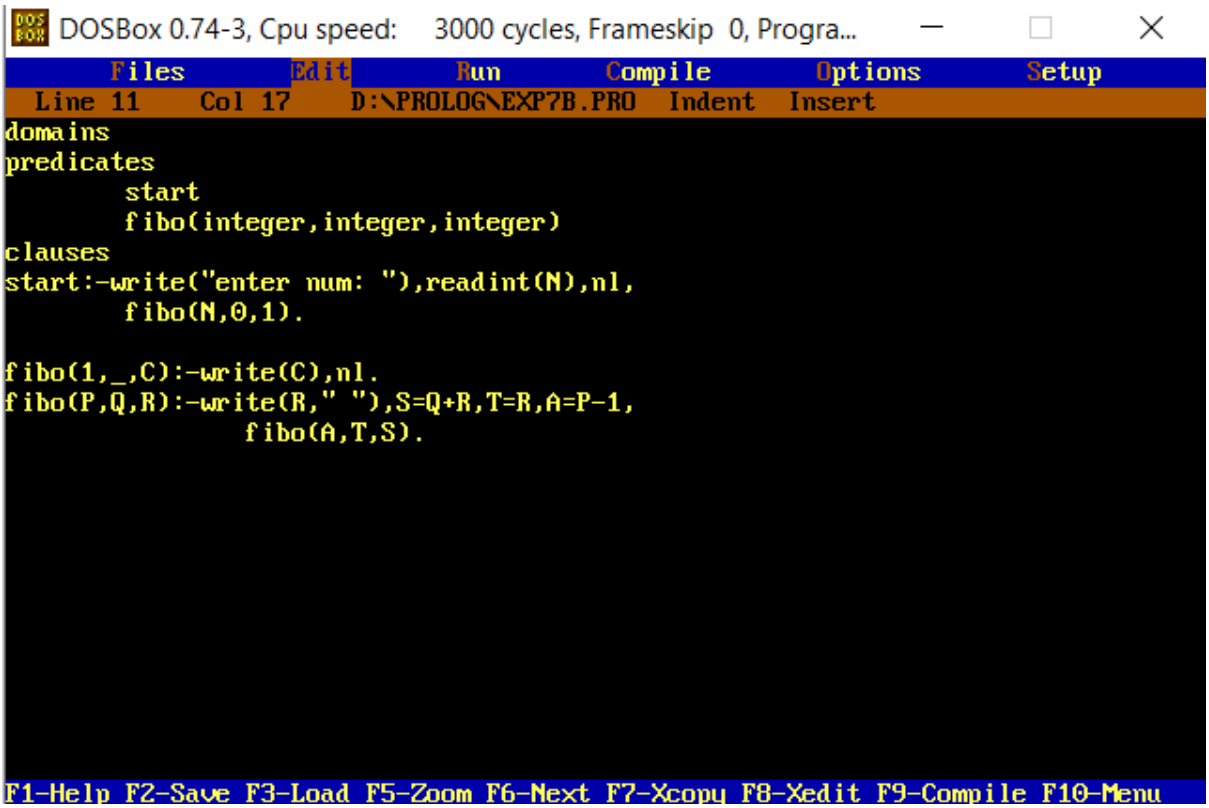
Example:-

Output:- Total number of numbers needed in output? 6

Fibonacci series of first “6“

numbers:- 1,1,2,3,5,8

CODE:



```
domains
predicates
        start
        fibo(integer,integer,integer)
clauses
start:-write("enter num: "),readint(N),nl,
        fibo(N,0,1).

fibo(1,_,C):-write(C),nl.
fibo(P,Q,R):-write(R," "),S=Q+R,T=R,A=P-1,
                fibo(A,T,S).
```

OUTPUTS: