Lab4 - WAP for using Input, Output and fail predicates in prolog.

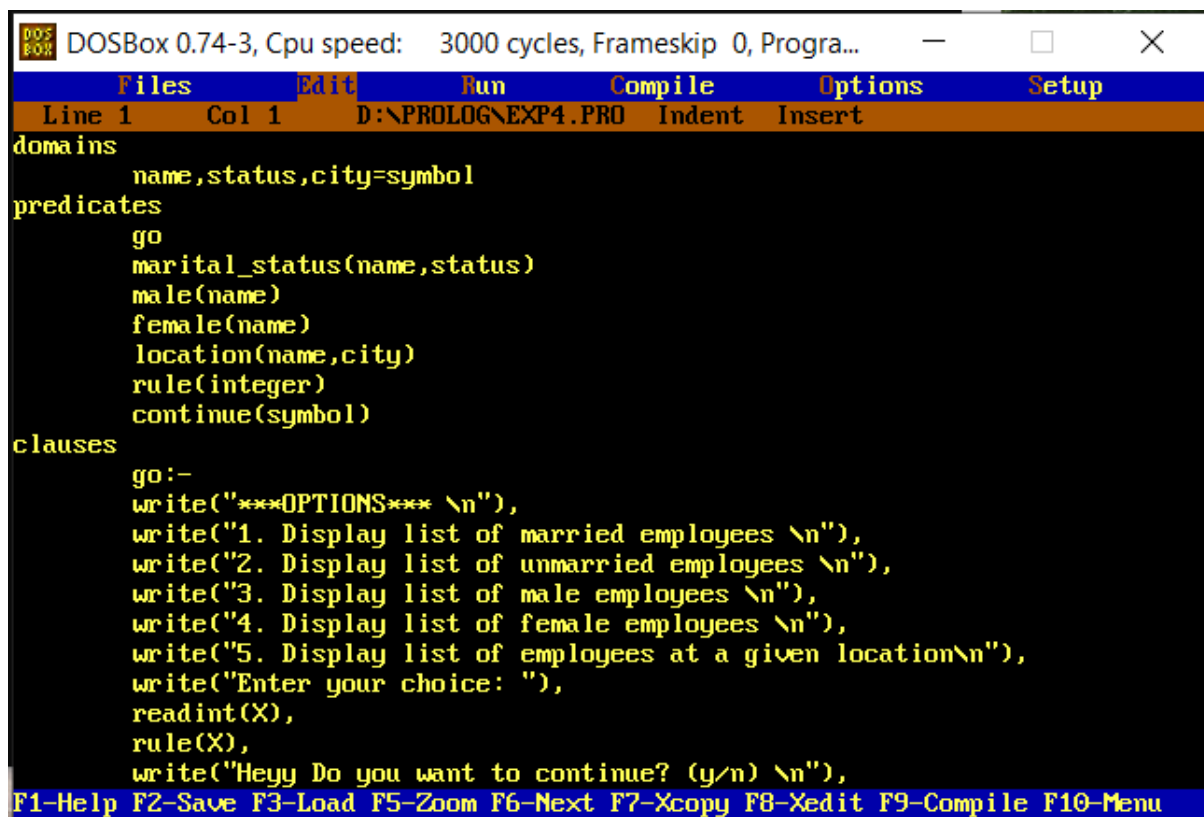Write program using write, writef, readint,readchar,readln ,readreal predicates

• Store facts of employee name, age, job location, marital status and gender.

Display (i) list of married & unmarried employees

(ii) List of male & female employees

(iii) List of employees for given job location

Code:

```
DOSBox 0.74-3, Cpu speed:    3000 cycles, Frameskip  0, Progra...    —    □    ✕

      Files        Edit        Run        Compile        Options        Setup
  Line 44    Col 35    D:\PROLOG\EXP4.PRO   Indent    Insert
        readln(Y),
        continue(Y).
        rule(1):- marital_status(Y,married),write(Y),nl,fail.
        rule(1).
        rule(2):- marital_status(Y,unmarried),write(Y),nl,fail.
        rule(2).
        rule(3):- male(Y),write(Y),nl,fail.
        rule(3).
        rule(4):- female(Y),write(Y),nl,fail.
        rule(4).
        rule(5):- write("Enter location: "),readln(Y),location(Z,Y),write(Z),nl,
        rule(5).
        continue(y):- go.
        marital_status(darshak,married).
        marital_status(charmi,unmarried).
        marital_status(arya,unmarried).
        marital_status(ayushi,married).
        male(darshak).
        male(arya).
        female(charmi).
        female(ayushi).
        location(darshak,jamnagar).
F1-Help F2-Save F3-Load F5-Zoom F6-Next F7-Xcopy F8-Xedit F9-Compile F10-Menu
```
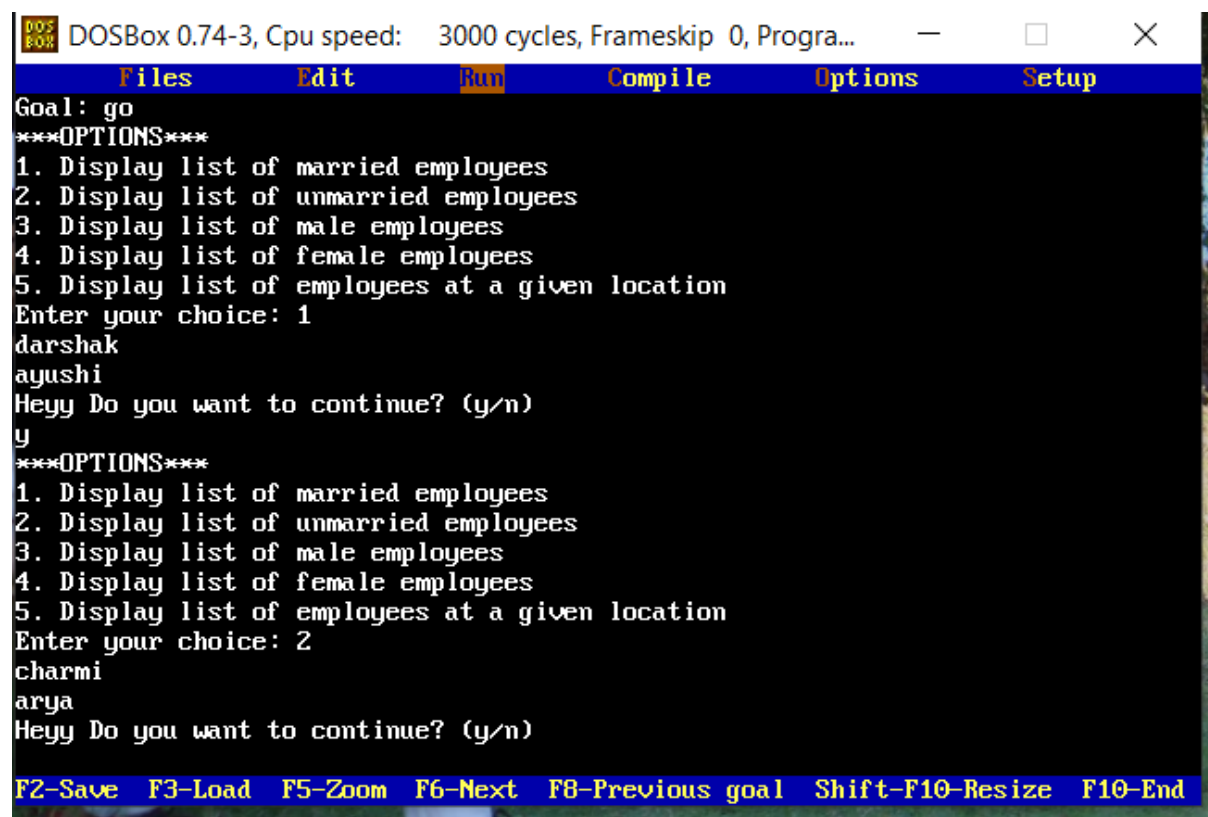
```
        female(ayushi).
        location(darshak,jamnagar).
        location(charmi,surat).
        location(arya,rajkot).
        location(ayushi,jamnagar).
F1-Help F2-Save F3-Load F5-Zoom F6-Next F7-Xcopy F8-Xedit F9-Compile F10-Menu
```
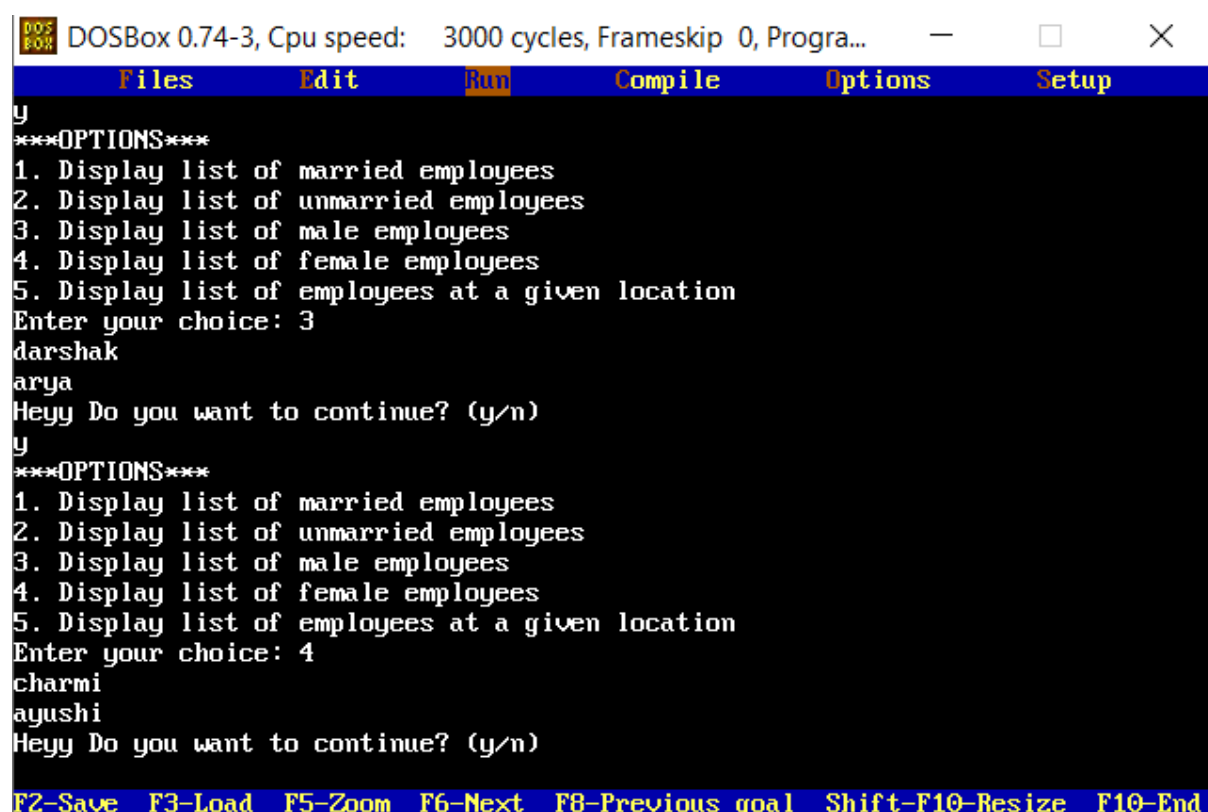
Output:

```
Heyy Do you want to continue? (y/n)
y
***OPTIONS***
1. Display list of married employees
2. Display list of unmarried employees
3. Display list of male employees
4. Display list of female employees
5. Display list of employees at a given location
Enter your choice: 5
Enter location: jamnagar
darshak
ayushi
Heyy Do you want to continue? (y/n)
n
No
Goal: _
F2-Save  F3-Load  F5-Zoom  F6-Next  F8-Previous goal  Shift-F10-Res
```

Code:

domains

    name,status,city=symbol

predicates

    go

    marital_status(name,status)

    male(name)

    female(name)

    location(name,city)

    rule(integer)

    continue(symbol)

clauses

    go:-

    write("*OPTIONS*** \n"),**

    write("1. Display list of married employees \n"),

    write("2. Display list of unmarried employees \n"),

    write("3. Display list of male employees \n"),

    write("4. Display list of female employees \n"),

    write("5. Display list of employees at a given location\n"),

```prolog
write("Enter your choice: "),

readint(X),

rule(X),

write("Heyy Do you want to continue? (y/n) \n"),

readln(Y),

continue(Y).

rule(1):- marital_status(Y,married),write(Y),nl,fail.

rule(1).

rule(2):- marital_status(Y,unmarried),write(Y),nl,fail.

rule(2).

rule(3):- male(Y),write(Y),nl,fail.

rule(3).

rule(4):- female(Y),write(Y),nl,fail.

rule(4).

rule(5):- write("Enter location: "),readln(Y),location(Z,Y),write(Z),nl,fail.

rule(5).

continue(y):- go.

marital_status(darshak,married).

marital_status(charmi,unmarried).

marital_status(arya,unmarried).

marital_status(ayushi,married).

male(darshak).

male(arya).

female(charmi).

female(ayushi).

location(darshak,jamnagar).

location(charmi,surat).

location(arya,rajkot).

location(ayushi,jamnagar).
```