

Lab-10 WAP to study Using dynamic database in prolog.

Procedure:-

- Store facts of student(name, branch, semester , percentage) dynamically.
- Use asserta predicate to enter new data in dynamic database.
- Use retract predicate to delete a given data from dynamic db.
- Create appropriate predicate to search and display some specified students details.
- Create appropriate predicate to list all the students having percentage greater than some specified value

Code:

```

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Progra...
Files Edit Run Compile Options Setup
Line 1 Col 1 D:\PROLOG\EXP10.PRO Indent Insert
domains
    name,branch,sem,P=symbol
database
    student(name,branch,sem,P)
predicates
    start
    rule(integer)
    continue(symbol)
clauses
    start:-write("**MENU**"),nl,
        write("1.Enter new student details"),nl,
        write("2.Delete a student data"),nl,
        write("3.Display specific student details"),nl,
        write("4.List of students having % greater than specified%"),nl,
        write("5.Display all the students"),nl,
        write("6.Exit"),nl,
        write("Enter your choice:-"),readint(X),rule(X),
        write("Heyy Do you want to continue with menu? (y/n) \n"),
        readln(Y),
        continue(Y).

    rule(1):-write("Enter name:"),readln(N),nl,

```

```

Files Edit Run Compile Options Setup
Line 45 Col 29 D:\PROLOG\EXP10.PRO Indent Insert
write("Enter semester:"),readln(S),nl,
write("Enter PER:"),readln(P),nl,
asserta(student(N,B,S,P)),
save("student.txt").
rule(2):-write("Enter the student name to be deleted:"),
readln(N),
retract(student(N,_,_,_)),save("student.txt"),
write("\nRecord Deleted Successfully"),nl.
rule(3):-write("Enter name:"),
readln(N),
student(N,X,Y,Z),
write("Name:",N," Branch:",X," sem:",Y," PER:",Z),nl.
rule(4):-write("Enter minimum PER:"),readln(T),
student(X,Y,Z,P),P>T,
write("Name:",X," Branch:",Y," sem:",Z," PER:",P),nl,fail.
rule(4).
rule(5):-student(X,Y,Z,P),
write("Name:",X," Branch:",Y," sem:",Z," PER:",P),nl,fail.
rule(5).
rule(6).

continue(y):- start._
F1-Help F2-Save F3-Load F5-Zoom F6-Next F7-Xcopy F8-Xedit F9-Compile F10-Menu

```

domains

name,branch,sem,P=symbol

database

student(name,branch,sem,P)

predicates

start

rule(integer)

continue(symbol)

clauses

```

start:-write("***MENU***"),nl,
write("1.Enter new student details"),nl,
write("2.Delete a student data"),nl,
write("3.Display specific student details"),nl,
write("4.List of students having % greater than specified%"),nl,
write("5.Display all the students"),nl,
write("6.Exit"),nl,

```

```
write('Enter your choice:-'),readint(X),rule(X),  
write('Heyy Do you want to continue with menu? (y/n) \n'),  
readln(Y),  
continue(Y).
```

```
rule(1):-write('Enter name:'),readln(N),nl,  
         write('Enter branch:'),readln(B),nl,  
         write('Enter semester:'),readln(S),nl,  
         write('Enter PER:'),readln(P),nl,  
         asserta(student(N,B,S,P)),  
         save('student.txt').
```

```
rule(2):-write('Enter the student name to be deleted:'),  
         readln(N),  
         retract(student(N,_,_,_)),save('student.txt'),  
         write('\nRecord Deleted Successfully'),nl.
```

```
rule(3):-write('Enter name:'),  
         readln(N),  
         student(N,X,Y,Z),  
         write('Name:',N,' Branch:',X,' sem:',Y,' PER:',Z),nl.
```

```
rule(4):-write('Enter minimum PER:'),readln(T),  
         student(X,Y,Z,P),P>T,  
         write('Name:',X,' Branch:',Y,' sem:',Z,' PER:',P),nl,fail.
```

```
rule(4).
```

```
rule(5):-student(X,Y,Z,P),  
         write('Name:',X,' Branch:',Y,' sem:',Z,' PER:',P),nl,fail.
```

```
rule(5).
```

```
rule(6).
```

```
continue(y):- start.
```

Output:

```
Goal: start
***MENU***
1.Enter new student details
2.Delete a student data
3.Display specific student details
4.List of students having % greater than specified%
5.Display all the students
6.Exit
Enter your choice:-1
Enter name:darshak

Enter branch:it

Enter semester:7

Enter PER:80

Heyy Do you want to continue with menu? (y/n)
_
```

```
Enter your choice:-1
Enter name:rohiy

Enter branch:ce

Enter semester:5

Enter PER:75

Heyy Do you want to continue with menu? (y/n)
```

```
***MENU***
1.Enter new student details
2.Delete a student data
3.Display specific student details
4.List of students having % greater than specified%
5.Display all the students
6.Exit
Enter your choice:-1
Enter name:anjan

Enter branch:civil

Enter semester:7

Enter PER:80

Heyy Do you want to continue with menu? (y/n)
y_
```

STUDENT - Notepad

File Edit Format View Help

```
student("anjan","civil","7","80")
student("rohiy","ce","5","75")
student("darshak","it","7","80")
```

```
0.EXIT
Enter your choice:-5
Name:anjan Branch:civil sem:7 PER:80
Name:rohiy Branch:ce sem:5 PER:75
Name:darshak Branch:it sem:7 PER:80
Heyy Do you want to continue with menu? (y/n)
```

F2-Save F3-Load F5-Zoom F6-Next F8-Previous

```
Enter your choice:-2
Enter the student name to be deleted:anjan
Record Deleted Successfully
Heyy Do you want to continue with menu? (y/n)
y
```

xxMENUxx

```
0.EXIT
Enter your choice:-5
Name:rohiy Branch:ce sem:5 PER:75
Name:darshak Branch:it sem:7 PER:80
Heyy Do you want to continue with menu? (y/n)
```

F2-Save F3-Load F5-Zoom F6-Next F8-Previous

STUDENT - Notepad

File Edit Format View Help

```
student("rohiy","ce","5","75")
student("darshak","it","7","80")
```

```
Enter your choice:-3
Enter name:darshak
Name:darshak Branch:it sem:7 PER:80
Heyy Do you want to continue with menu? (y/n)
```

F2-Save F3-Load F5-Zoom F6-Next F8-Previous

```
0.EXIT
Enter your choice:-4
Enter minimum PER:78
Name:darshak Branch:it sem:7 PER:80
Heyy Do you want to continue with menu? (y/n)
```