**Experiment 6**

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**Aim:** Write program to study usage of cut,not,fail predicates in prolog.

**Procedure:**

Write a prolog program having facts in clauses section for predicate

student(studentname,branchname). Use cut !, fail, not predicates to

• Display list of all students

• Display list of students for given specific branch.

• Display list of students excluding specific branch.

**Code:**

Domains

studentname,branchname,input=symbol

Predicates

go

student(studentname,branchname)

rule(integer) continue(symbol) cut(symbol,symbol)

Clauses

student(divyesh,it). student(mehul,ce). student(yash,ec). student(akshay,it).

go:-

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

write("1) Display list of all students \n"), write("2) Display list of students for given specific branch. \n"), write("3) Display list of students excluding specific branch \n"),

write("4) Display list of students excluding specific branch Using Cut

\n"),

write("Enter your choice- \n"),

readint(X),

rule(X),

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

readln(Y), continue(Y). rule(1):-

student(X,Y),write(X),write("-"),write(Y),nl,fail.

rule(1). rule(2):-

write("Enter name of branch for which student list needed-"), readln(Y),student(X,Y),write(X),write("-"),write(Y),nl,fail.

|  |  |  |
| --- | --- | --- |
|  |  | rule(2). |
|  |  | rule(3):- |
| readln(Y), |  | write("Enter branch name to be excluded from result –"), |
|  |  | student(X,Z),not(Z=Y),write(X),write("-"),write(Z),nl,fail. |
|  |  | rule(3). |
|  |  | rule(4):- |
| readln(Y) |  | write("Enter branch name to be excluded from result –"), |
|  |  | ,student(X,Z),cut(Z,Y),write(X),write("-"),write(Z),nl,fail. |
|  |  | rule(4). |
|  |  | cut(Z,Y):- Z=Y,!,fail. |
|  |  | cut(\_,\_). |
|  |  | continue(y):- go. |
|  |  |  |

**Output:**







