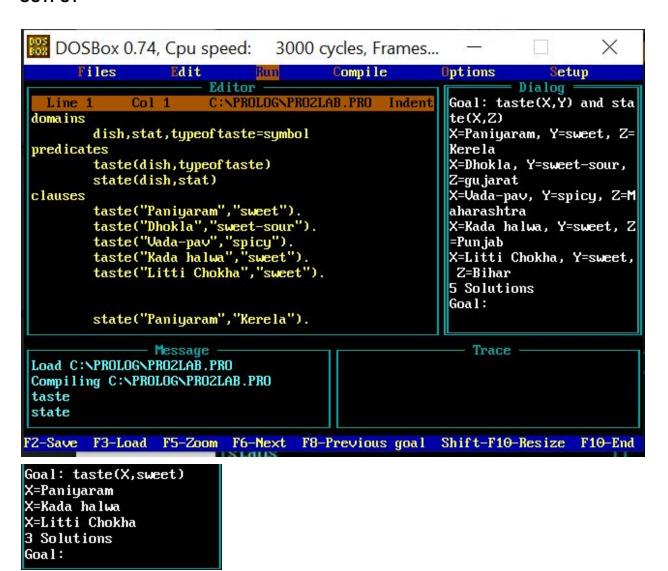
#### **KS PROJECT**

PROJECT NAME: FOOD PREDICTOR PARTNER NAME: ADITI SHAH (IT-098)

According to experiments we have implemented logic in our project.

# • Experiment 2

```
domains
       dish,stat,typeoftaste=symbol
predicates
       taste(dish,typeoftaste)
       state(dish,stat)
clauses
       taste("Paniyaram", "sweet").
       taste("Dhokla", "sweet-sour").
       taste("Vada-pav", "spicy").
       taste("Kada halwa", "sweet").
       taste("Litti Chokha", "sweet").
       state("Paniyaram","Kerela").
       state("Dhokla","gujarat").
       state("Vada-pav","Maharashtra").
       state("Kada halwa", "Punjab").
       state("Litti Chokha", "Bihar").
```



## Experiment 3 and 4

```
domains
item, item type, taste, min range, max range, expected time=symbol
predicates
food(item,item type,taste,min range,max range,expected time)
go
rule(integer)
clauses
go:-write("*******OPTIONS*******").nl.
write("1. Dispaly list of all Item"),nl,
write("2. Display list of Spicy Items"),nl,
write("3. Display list of Sweeter Items "),nl,
write("4. Display list of Medium Items "),nl,
write("5. Display List of Punjabi"),nl,
write("6. Display list of Chinese"),nl,
write("7. Display list of South Indian"),nl,
write("8. Display list of Maharashtrian"),nl,
write("9. Display list of Gujarat"),nl,
write("enter your choice :-"),readint(C),nl,rule(C).
rule(1):-food(X,\underline{\ \ \ \ \ \ },\underline{\ \ \ \ \ \ \ },write(X),nl,fail.
rule(1):-write("Do you want to continue(y/n)?"),
readln(Ans),
Ans="y",
go.
rule(2):- food(Y,_,"spicy",_,,_,),write(Y),nl,fail.
rule(2):-
write("Do you want to continue(y/n)?"),
readIn(Ans),
Ans="y",
go.
rule(3):-food(Z,_,"sweet",_,,_),write(Z),nl,fail.
rule(3):-write("Do you want to continue(y/n)?"),
readln(Ans),
Ans="v",
```

```
go.
rule(4):- food(A,_,"medium",_,,_),write(A),nl,fail.
rule(4):-write("Do you want to continue(y/n)?"),
readIn(Ans),
Ans="y",
go.
rule(5):- food(B,"punjabi",__,_,_),write(B),nl,fail.
rule(5):-write("Do you want to continue(y/n)?"),
readln(Ans),
Ans="y",
go.
rule(6):- food(D,"chinese",__,_,),write(D),nl,fail.
rule(6):-write("Do you want to continue(y/n)?"),
readln(Ans),
Ans="y",
go.
rule(7):- food(D, "south indian", , , , ), write(D), nl, fail.
rule(7):-write("Do you want to continue(y/n)?"),
readln(Ans),
Ans="y",
go.
rule(8):- food(D,"mahashtrian",__,_,_),write(D),nl,fail.
rule(8):-write("Do you want to continue(y/n)?"),
readln(Ans),
Ans="y",
go.
rule(9):- food(D,"gujarat",_,_,_,),write(D),nl,fail.
rule(9):-write("Do you want to continue(y/n)?"),
readln(Ans),
Ans="y",
```

food("manchurian", "chinese", "spicy", "80", "180", "20").

food("Chinese Bhel", "chinese", "medium", "100", "200", "10"). food("Paneer Toofani", "punjabi", "spicy", "130", "180", "25").

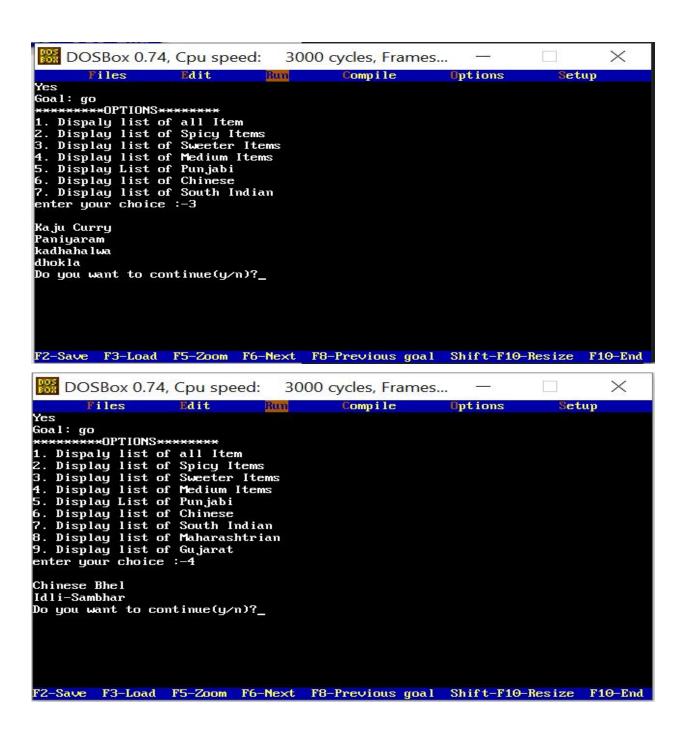
go.

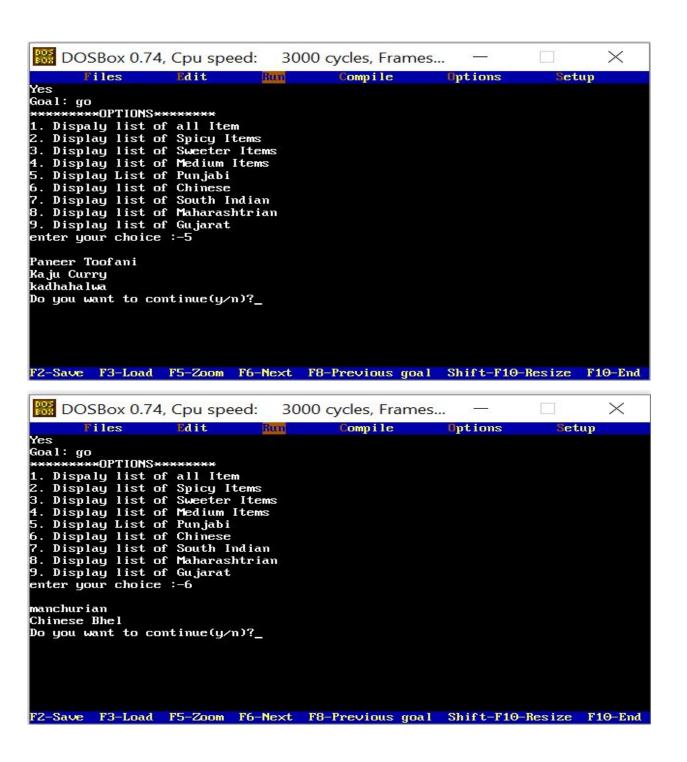
```
food("Kaju Curry","punjabi","sweet","130","200","20"). food("Idli-Sambhar","south_indian","medium","60","110","30"). food("Paniyaram","south_indian","sweet","110","160","25"). food("vadapav","mahashtrian","spicy","20","40","6"). food("kadhahalwa","punjabi","sweet","70","150","30"). food("dhokla","gujarat","sweet","50","80","15").
```

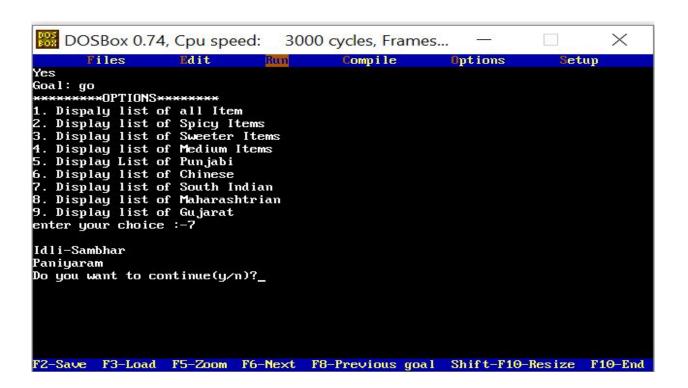
```
BOSBox 0.74, Cpu speed:
                                           3000 cycles, Frames...
                                                                                                    X
         Files
                        Edit
                                                   Compile
                                                                       Options
                                                                                           Setup
 Yes
Goal: go
 *********OPTIONS****

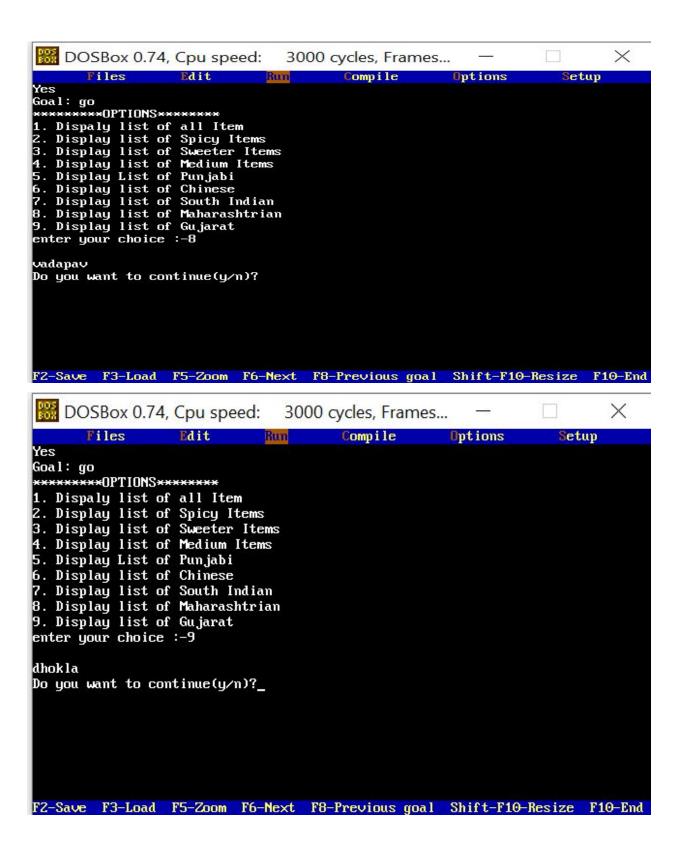
    Dispaly list of all Item
    Display list of Spicy Items

Display list of Sweeter Items
4. Display list of Medium Items
5. Display List of Punjabi
6. Display list of Chinese
7. Display list of South Indian
 enter your choice :-1
 nanchurian
Chinese Bhel
Paneer Toofani
Kaju Curry
Idli-Sambhar
Paniyaram
 vadapav
kadhaha lwa
dhokla
Do you want to continue(y/n)?_
F2-Save F3-Load F5-Zoom F6-Next F8-Previous goal
                                                                       Shift-F10-Resize
                                                                                                F10-End
BB DOSBox 0.74, Cpu speed:
                                           3000 cycles, Frames...
                      Edit
        Files
                                  Run
                                                 Compile Options
res
Goal: go
 ·×××××××OPTIONS×××××
1. Dispaly list of all Item
2. Dispaly list of all Item
2. Display list of Spicy Items
3. Display list of Sweeter Items
4. Display list of Medium Items
5. Display List of Punjabi
6. Display list of Chinese
7. Display list of South Indian
enter your choice:-2
enter your choice :-2
nanchurian
Paneer Toofani
vadapav
Do you want to continue(y/n)?_
F2-Save F3-Load F5-Zoom F6-Next F8-Previous goal Shift-F10-Resize
                                                                                               F10-End
```









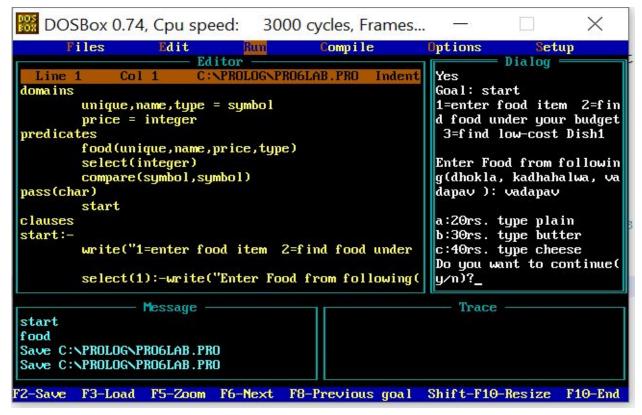
```
predicates
start

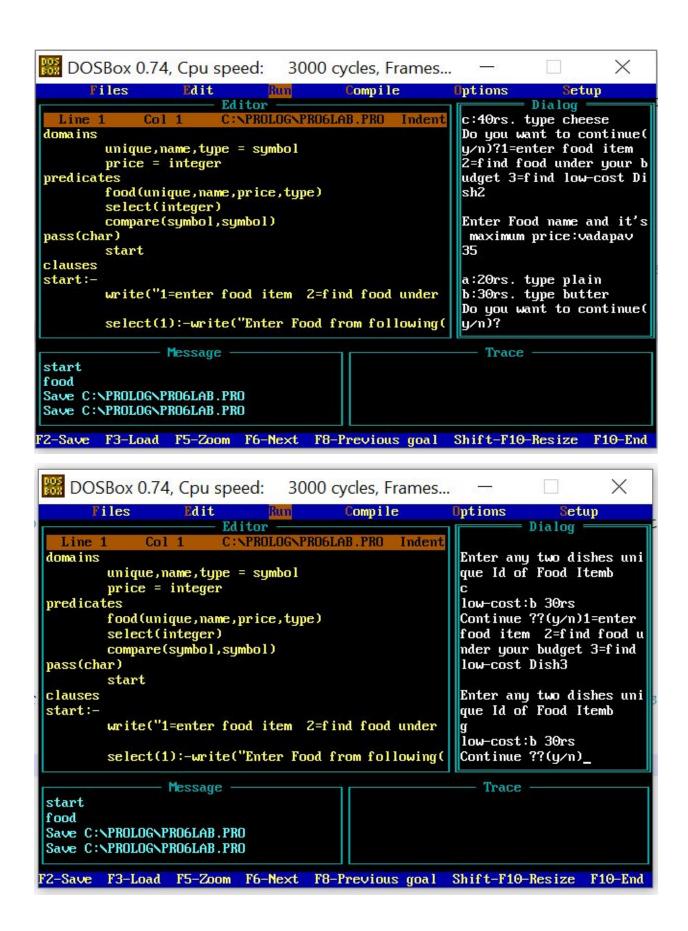
clauses
start:-
write("Enter name of Customer:"),readln(P),nl,
write("Enter Total Price:"),readreal(T),nl,
write("Enter Voucher in %"),readreal(V),nl,
write("---Your final Bill---"),nl,
X=V/100,DC=T*X,
write("Customer Name: ",P),nl,
write("Price: ",T),nl,
write("Discount: ",V),nl,
TA=T-DC,
write("Total Amount is: ",TA),nl.
```

```
BB DOSBox 0.74, Cpu speed:
                                 3000 cycles, Frames...
                                                                             X
      Files
                   Edit
                                         Compile
                                                        Options
                                                                 Dialog
                        C:\PROLOG\PRO5LAB.PRO Indent
                                                         Goal: start
predicates
                                                         Enter name of Customer:m
        start
                                                         uskan
clauses
                                                         Enter Total Price:100
        write("Enter name of Customer:"), readln(P),n
                                                        Enter Voucher in %20
        write("Enter Total Price:"),readreal(T),nl,
        write("Enter Voucher in x"), readreal(V), nl,
                                                           -Your final Bill--
                                                         Customer Name: muskan
        write("---Your final Bill---"),nl,
                                                         Price: 100
                                                        Discount: 20
        X=U/100, DC=T*X,
                                                        Total Amount is: 80
        write("Customer Name: ",P),nl,
write("Price: ",T),nl,
                                                        Yes
                                                         Goal:
                                                           Trace
                Message
Compiling C:\PROLOG\PRO5LAB.PRO
Load C:\PROLOG\PRO5LAB.PRO
Compiling C:\PROLOG\PRO5LAB.PRO
start
        F3-Load F5-Zoom F6-Next F8-Previous goal Shift-F10-Resize F10-End
Z-Save
```

```
domains
      unique,name,type = symbol
      price = integer
predicates
     food(unique,name,price,type)
      select(integer)
      compare(symbol,symbol)
pass(char)
      start
clauses
start:-
     write("1=enter food item 2=find food under your budget 3=find
low-cost Dish"),readint(N),nl,select(N).
      select(1):-write("Enter Food from following(dhokla, kadhahalwa,
vadapav ): "),readln(S),nl,food(X,S,Y,Z),write(X,":",Y,"rs. type ",Z),nl,fail.
      select(1):-
                 write("Do you want to continue(y/n)?"),
                 readchar(Ans),
                 pass(Ans).
      select(2):-write("Enter Food name and it's maximum
price:"),readln(C),readint(D),nl,food(B,C,E,Z),not(D<E),write(B, ":",E,"rs.
type ",Z),nl,fail.
     select(2):-
                 write("Do you want to continue(y/n)?"),
                 readchar(Ans),
                 pass(Ans).
      select(3):-write("Enter any two dishes unique Id of Food
Item"),readln(F),readln(G),compare(F,G),nl,write("Continue
??(y/n)"),readchar(C),pass(C).
      select(3):-
                 write("Do you want to continue(y/n)?"),
                 readchar(Ans),
                 pass(Ans).
```

```
compare(F,G):-food(F,\_,H,\_),food(G,\_,I,\_),H<I,!,write("low-cost:",F,"",H,"rs");food(G,\_,I,\_),write("costly:",G,"",I,"rs").\\pass('y'):-start.\\pass('n'):-nI,write("Thanks for checking"),nI.\\food(a,vadapav,20,plain).\\food(b,vadapav,30,butter).\\food(c,vadapav,40,cheese).\\food(d,kadhahalwa,70,plain).\\food(e,kadhahalwa,100,dryfruits).\\food(f,dhokla,50,white).\\food(g,dhokla,60,yellow).
```





```
domains
     name,sym,type = symbol
     price = integer
predicates
     food(name,price,type)
     order(char,integer)
     start
clauses
     start:-write("You can start ordering!"),nl,order('y',0).
     order('n',F):-write("----ORDERS-----"),nl,write("Total amount of
your ordering",F),nl.
     order('y',B):-write("enter name of food and type of food:
"),readln(C),readln(N),nl,
     food(C,D,N),T=B+D,write("Continue??(y/n):
"),readchar(A),nl,order(A,T).
     food(vadapav,20,plain).
     food(vadapav, 30, butter).
     food(vadapav,40,cheese).
     food(kadhahalwa,70,plain).
     food(kadhahalwa, 100, dryfruits).
     food(dhokla,50,white).
     food(dhokla,60,yellow).
```

```
BOSBox 0.74, Cpu speed:
                                         3000 cycles, Frames...
                                                                                               \times
                                                                    Options
                                                  Compile
                                                                                      Setup
Yes
Goal: start
You can start ordering!
enter name of food and t
ype of food: vadapav
butter
Continue??(y/n):
enter name of food and t
ype of food: dhokla
yellow
Continue??(y/n):
enter name of food and t
ype of food: ∨adapa∨
cheese
Continue??(y/n):
     -ORDERS
Total amount of your ordering130
Yes
Goal:
F2-Save F3-Load F5-Zoom F6-Next F8-Previous goal Shift-F10-Resize F10-End
```

```
CODE:
predicates
     start
     max(integer,integer,integer,symbol)
     min(integer,integer,integer,symbol)
     select(integer)
clauses
     start:-write("Enter Food Item: 1. Vadapav, 2. kadhahalwa, 3.
dhokla"),nl,readint(C),nl,select(C).
     select(1):-
           C=20,
           D = 30.
           E=40,max(C,D,E,vadapav),nl,min(C,D,E,vadapav).
     select(2):-
           C = 70.
           D=100.
           E=150,max(C,D,E,kadahalwa),nl,min(C,D,E,kadahalwa).
     select(3):-
           C=50.
           D=60,
           E=80,max(C,D,E,dhokla),nl,min(C,D,E,dhokla).
     max(P,Q,R,T):-P>Q,P>R,write("maximum price of
"),write(T),write("is"),write(P),write("rs.").
     max(P,Q,R,T):-P<Q,Q>R,write("maximum price of
"),write(T),write("is"),write(Q),write("rs.").
     max(P,Q,R,T):-R>Q,R>P,write("maximum price of
"),write(T),write("is"),write(R),write("rs.").
     min(P,Q,R,T):-P<Q,P<R,write("minimum price of
"), write(T), write("is"), write(P), write("rs.").
     min(P,Q,R,T):-Q<P,Q<R,write("minimum price of
"),write(T),write("is"),write(Q),write("rs.").
     min(P,Q,R,T):-R<P,R<Q,write("minimum price of
"),write(T),write("is"),write(R),write("rs.").
```

```
Piles Pdit Run Compile Options Setup

Yes
Goal: start
Enter Food Item: 1. Vadapav, 2. kadhahalwa,3. dhokla

3

maximum price of dhoklais80rs.
minimum price of dhoklais50rs.Yes
Goal: _

F2-Save F3-Load F5-Zoom F6-Next F8-Previous goal Shift-F10-Resize F10-End
```

```
domains
      type,qty,desc,nameofitem=symbol
      x=item(qty,desc,nameofitem)
      i=items(type,x)
predicates
      readitems(i)
      loop(integer)
      start
clauses
start:-write("Enter number of items: "),readint(X),nl,loop(X).
            loop(0).
loop(X):-XX=X-1, readitems(Item), nl, write(Item), nl, loop(XX).
readitems(items(Type,item(Qty,Desc,Name))):-
write("Enter Name of the Item you would like to order:
"),readIn(Name),
write("Enter Type of the Item: "),readln(Type),
write("Enter Description of the taste of the Item (Sweet/Sour/Spicy):
"),readIn(Desc),
write("Enter Quantity of the Item: "),readln(Qty).
```

```
BB DOSBox 0.74, Cpu speed:
                                                   3000 cycles, Frames...
                                               Run
                                                                Compile
                                                                                      Options
                                                                                                             etup
Goal: start
Enter number of items: 2
Enter Name of the Item you would like to order: vadapav
Enter Type of the Item: cheese
Enter Description of the taste of the Item (Sweet/Sour/Spicy): Spicy
Enter Quantity of the Item: 4
items("cheese",item("4","Spicy","vadapav"))
Enter Name of the Item you would like to order: dhokla
Enter Type of the Item: yellow and white
Enter Description of the taste of the Item (Sweet/Sour/Spicy): sweet-sour combin
ation
Enter Quantity of the Item: 4
items("yellow and white",item("4","sweet-sour combination","dhokla"))
Yes
Goal: _
F2-Save F3-Load F5-Zoom F6-Next F8-Previous goal Shift-F10-Resize
```

```
domains
      name,type,taste=symbol
      price=integer
database
      foodItem(name,price,type,taste)
predicates
      go1
      list(integer)
clauses
      go1:-
            write("Select options"),nl,
            write("1. enter new details of food items"),nl,
            write("2. delete food item"),nl,
            write("3. display food item"),nl,
            write("4. list of food item having more than specified price
"),nl,
            write("5. Display list of all Food Items: "),nl,
            readInt(Input),
            list(Input).
      list(1):-
            write("enter name::"),
            readln(Name),
            write("enter price:"),
            readint(Price),
            write("enter Type:"),
            readln(Type),
            write("enter Taste:"),
            readln(Taste),
            asserta(foodItem(Name, Price, Type, Taste)),
            save("foodItem.txt"),
            write("continue(y/n)?"),
            readChar(Ans),
            Ans='y',nl,
            go1.
```

```
list(2):-
            write("enter name and type of food you want to delete"),
            readIn(Name),readIn(Type),
            retract(foodItem(Name,_,Type,_)),nl,
            save("foodItem.txt"),
            write("continue(y/n)?"),
            readChar(Ans),
            Ans='y',nI,
            go1.
     list(3):-
            write("Enter Food item name:"),readln(Name),
            consult("foodItem.txt"),
            foodItem(Name, Price, Type, Taste),
            write("Food name:",Name," Price:",Price," Type: ",Type,
" Taste: ",Taste),nl,
           write("continue(y/n)?"),
            readChar(Ans),nl,
            Ans='y',
            go1.
     list(4):-
            write("Enter Price : "),readInt(Price),
            consult("foodItem.txt"),
            foodItem(N,B,S,X),
            B>Price,
            write("Food name:",N," Price:",B," Type: ",S,
"Taste",X),nl,fail.
     list(5):-
            consult("foodItem.txt"),foodItem(N,B,S,X),
            write("Food name:",N," Price:",B," Type: ",S, " Taste:
",X),nl,fail.
```

```
DOSBox 0.74, Cpu speed: 3000 cycles, Frames...
                                                                           \times
               Edit Run
                                       Compile
                                                     Options
      Files
                                                                    Setup
Yes
Goal: go1
Select options

    enter new details of food items

delete food item
3. display food item
4. list of food item having more than specified price
5. Display list of all Food Items :
enter name::Pizza
enter price:100
enter Type:cheesy
enter Taste:sweet-spicy
continue(y/n)?
Select options

    enter new details of food items

2. delete food item
3. display food item
4. list of food item having more than specified price
5. Display list of all Food Items :
F2-Save F3-Load F5-Zoom F6-Next F8-Previous goal Shift-F10-Resize F10-End
Select options

    enter new details of food items

2. delete food item
3. display food item
4. list of food item having more than specified price
5. Display list of all Food Items :
enter name and type of food you want to deletePanni-Puri
mix spicy water
continue(y/n)?_
F2-Save F3-Load F5-Zoom F6-Next F8-Previous goal Shift-F10-Resize F10-End
```

