SIMULATING_A_FUTBOL_LEAGUE_USING_PROLOG

PREDICATES & AIMES

list_length:

To find length of the lists. sum_list To find sum of the lists.

pair_sort:

To sort the pairs in the list first_n_of_list To get the first n element of a list.

allTeams:

To list the teams and find the length of this list. wins To list the teams win their matches which week you choose.

losses:

To list the teams lose their matches which week you choose. draws To list the teams draw their matches which week you choose.

scored:

To find goal score of a team which week you choose. conceded To find conceded score of a team which week you choose.

average:

To find average (goal scores minus conceded scores) of a team in all past weeks.(include the week you enter) order To find the ordered list according to teams' average in all past weeks. (include the week you enter)

topThree:

To find first three teams of the ordered list according to teams' average in all past weeks.(include the week you enter)

EXPLANATIONS OF PREDICATES

In the ***allTeams*** predicate ;

>I use ***findall()*** to list the teams and list_length() to find the length of the list.

In the wins predicate ;

>I use ***findall()*** to list the teams beated by a team which week you enter and ***list_length()*** to find the length of the list.

In the ***losses*** predicate ;

>In the same way I use these(***findall()*** and ***list_length()***) to list the teams beated by a team which week you enter and find the length of the list,

In the ***draws*** predicate ;

>Likewise I use these(***findall()*** and ***list_length()***) to find the draws with each other in all past weeks(include the week you enter).

In the ***scored*** predicate ;

>I design scored part to the goal scores of the team from which week you enter to all past weeks.(include the week you enter).

In the ***conceded*** predicate ;

>In the same way I wrote conceded part to list of conceded goals of a team form which week you enter to all past weeks.(include the week you enter).

In the ***avarage*** predicate ;

>I design average part to find average (goal scores minus conceded goals) of a team in all past weeks.(include the week you enter).

In the ***order*** and ***topThree*** predicates ;

>***order*** finds the successful teams and list them according to their average list in all past weeks.(include the week you enter).

>***topThree*** list first three most successful teams(using ordered list of teams).

In addition, I use some built-in codes and different predicates.

I use ***msort, reverse, append, first_n_of_list, pairs_keys_values, pair_sorting*** in some parts of my code.

>***msort*** : to sort the averages of the teams in the list.

>***reverse*** : to reverse the list which I sort.

>***append*** : to gather the lists in one list.

>***pairs_keys_values*** :to catch the averages and names of the teams in one list.

>***pair_sorting :*** to sort the pairs.

>***first_n_of_list :*** to take first N (in this code N=3) elements of the main list (which we find in order section)