Analysis Brief

Project Name: premier league (Version I)	
Leaders :	Omar Khaled ,Mohamed Tarek, Omar Ezzat , Raneem weal , Rana Ahmed

Function	**complexity**
preprocess_data()	O(MlogM) ⟶ M is number of matches
create_teams()	O(M) which M is number of matches
get_points()	O(1)
print_teams()	O(M) which M is number of matches
create_matches()	Takes O(M) which M is number of matches
construct_graph()	O(M) which M is number of matches
traverse()	O(M) which M is number of matches
DFS()	O(M) which M is number of matches
display_graph()	O(M) which M is number of matches
OVERALL	**O(MlogM) ⟶ M is number of matches**

ANALYSIS BRIEF

Project Name: premier league (Version II)

Leaders : **Mohamed Tarek, Omar Ezzat, Omar Khaled , Raneem weal , Rana Ahmed**

Function	complexity
class Match and it' functions	O(1)
class EPLGraph: __init__()	O(T^2) where T is the number of teams
add_edge()	O(1)
construct_graph ()	O(M),where M is the number of matches
display_graph ()	O(T^2) , where T is the number of teams
traverse_graph_by_week ()	O(T^2) , where T is the number of teams
traverse_graph_by_date ()	O(T^2) , where T is the number of teams
create_matches ()	is O(M), where M is the number of matches
create_teams_dict_for_matrix ()	is O(T), where T is the number of teams
OVERALL	**O(T^2) , where T is the number of teams**