

Problem 2. Football team

```
class footballTeam{  
    //TODO Implement this class  
}
```

Write a **class Football team**, which supports the described functionality below:

Functionality

Constructor

Should have these **3** properties:

- **clubName** - string
- **country** - string
- **invitedPlayers** - empty array

At the initialization of the **FootballTeam** class, the **constructor** accepts the **clubName** and **country**.

Hint: You can add more properties to help you finish the task.

newAdditions(footballPlayers)

This method adds players to the invitation list. The method takes **one argument: footballPlayers (array of strings)**.

- **Every element** into this array is information about player in the format:
"{name}/{age}/{playerValue}"
 - They are **separated** by slash symbol **"/"**. The **playerValue** is in millions. **Example:** ["Kylian Mbappé/23/160", "Lionel Messi/35/50", "Pau Torres/25/52"...]
- If the **name** of the current player is already present in **invitedPlayers** array, update the old **playerValue** **only if** the current one is **higher**.
- Otherwise, should **add** the player, with properties: **{name, age, playerValue}** to the **invitedPlayers** array.
- In **all cases**, you must **finally return a string** in the following format:
"You successfully invite {name1}, {name2}, ...{nameN}."

Note: When returning the **string**, keep in mind that the different **names of football Players must be:**

- **Unique** - for instance:
 - **" You successfully invite Kylian Mbappé, Lionel Messi, Pau Torres "** - is a correctly returned string
 - **" You successfully invite Kylian Mbappé, Lionel Messi, Kylian Mbappé "** - is not a correctly returned string
- **Separated by comma and space (,)**

signContract(selectedPlayer)

With this method, manager can sign contracts with player from the invited list. The method takes **one argument**: **selectedPlayer (string)**.

- The string about the selected player is in the format:

"{name}/{playerOffer}"

- Check:

- If the **name** of the current player is not present in **invitedPlayers** array, an **error** with the following message should be **thrown**:

"{name} is not invited to the selection list!"

- If the **playerOffer** selected by the manager for a given player is **less** than the value recorded in the array **invitedPlayers**, an **error** with the following message should be **thrown**:

"The manager's offer is not enough to sign a contract with {name}, {priceDifference} million more are needed to sign the contract!"

- **priceDifference** - is the difference between **playerValue** and **playerOffer**.

- Otherwise, if the above conditions are not met, you must replace **playerValue** with the string **"Bought"**
- Finally, you need to **return** the string in the following format:

"Congratulations! You sign a contract with {BoughtPlayer} for {BuyingPrice} million dollars."

ageLimit(name, age)

With this method, we make sure that the players are young enough to sign a **five-year** contract with the team, a **reduced-time** contract, or no contract at all. The method takes **two arguments**:

- **name (string)**
- **age (number)**

- If the submitted **name** is not present in the **invitedPlayers** array, an **error** with the following message should be **thrown**:

"{name} is not invited to the selection list!"

- If the age recorded in the **invitedPlayers** array is **less than** the age submitted as an argument, you must check the difference between **limit age** and **player age**. If the difference is **less than** 5 years, return the following string:
"{name} will sign a contract for {ageDifference} years with {clubName} in {country}!"
 - **ageDifference** - is the difference between **limit age** and **player age**.
- If the age difference is **more than** 5 years, **return** the following message:

"{name} will sign a full 5 years contract for {clubName} in {country}!"

- If the player age from the **invitedPlayers** array is **greater** or **equal** than the age submitted as an argument, **return** the following message: **"{name} is above age limit!"**

transferWindowResult()

- This method **returns all players**, The first line shows the following message:
"Players list:"
- On the new line, display information about each player sorted in **ascending** order of **name**:
"Player {name}-{playerValue}"

Example

| Input 1 |
|--|
| <pre>let fTeam = new footballTeam("Barcelona", "Spain"); console.log(fTeam.newAdditions(["Kylian Mbappé/23/160", "Lionel Messi/35/50", "Pau Torres/25/52"]));</pre> |

| Output 1 |
|--|
| You successfully invite Kylian Mbappé, Lionel Messi, Pau Torres. |

| Input 2 |
|---|
| <pre>let fTeam = new footballTeam("Barcelona", "Spain"); console.log(fTeam.newAdditions(["Kylian Mbappé/23/160", "Lionel Messi/35/50", "Pau Torres/25/52"])); console.log(fTeam.signContract("Lionel Messi/60")); console.log(fTeam.signContract("Kylian Mbappé/240")); console.log(fTeam.signContract("Barbukov/10"));</pre> |

| Output 2 |
|---|
| <p>You successfully invite Kylian Mbappé, Lionel Messi, Pau Torres.</p> <p>Congratulations! You sign a contract with Lionel Messi for 60 million dollars.</p> <p>Congratulations! You sign a contract with Kylian Mbappé for 240 million dollars.</p> <p>Uncaught Error: Barbukov is not invited to the selection list!</p> |

Input 3

```
let fTeam = new footballTeam("Barcelona", "Spain");  
console.log(fTeam.newAdditions(["Kylian Mbappé/23/160", "Lionel Messi/35/50",  
"Pau Torres/25/52"]));  
console.log(fTeam.ageLimit("Lionel Messi", 33 ));  
console.log(fTeam.ageLimit("Kylian Mbappé", 30));  
console.log(fTeam.ageLimit("Pau Torres", 26));  
console.log(fTeam.signContract("Kylian Mbappé/240"));
```

Output 3

You successfully invite Kylian Mbappé, Lionel Messi, Pau Torres.
Lionel Messi is above age limit!
Kylian Mbappé will sign a full 5 years contract for Barcelona in Spain!
Pau Torres will sign a contract for 1 years with Barcelona in Spain!
Congratulations! You sign a contract with Kylian Mbappé for 240 million dollars.

Input 4

```
let fTeam = new footballTeam("Barcelona", "Spain");  
console.log(fTeam.newAdditions(["Kylian Mbappé/23/160", "Lionel Messi/35/50",  
"Pau Torres/25/52"]));  
console.log(fTeam.signContract("Kylian Mbappé/240"));  
console.log(fTeam.ageLimit("Kylian Mbappé", 30));  
console.log(fTeam.transferWindowResult());
```

Output 4

You successfully invite Kylian Mbappé, Lionel Messi, Pau Torres.
Congratulations! You sign a contract with Kylian Mbappé for 240 million dollars.
Kylian Mbappé will sign a full 5 years contract for Barcelona in Spain!
Players list:
Player Kylian Mbappé-Bought
Player Lionel Messi-50

