JS Advanced: Exam 19 December 2016

Problems for exam preparation for the "JavaScript Advanced" course @ SoftUni. Submit your solutions in the SoftUni judge system at https://judge.softuni.bg/Contests/375/.

Problem 3. Player (Simple Class)

Write a **JavaScript class Player**.

```
class Player {
    // TODO: implement this class
}
```

Each **player** holds **nickname** and list of **scores** . Implement the following features:

- **Constructor(nickName)** – creates a player with given nickname.
- Method **addScore(score)** – adds a score (**number**) to the **scores** list. If passed argument is not a valid number do nothing (ignore it).
- Accessor property **scoreCount** – returns the total amount of scores in the list.
- Accessor property **highestScore** – returns the highest score (number) in the list.
- Accessor property **topFiveScore** – gets the top 5 score (**ordered** descending), print all scores available if the score's count is below or equal to 5.
- Method **toString()** – returns the text representation of the player in the following format:
  - Player with only nickname:

```
{nickname}: []
```

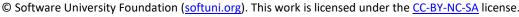 - Player with several scores (e.g. 450 and 200), **ordered** by descending:

```
{nickname}: [450,200]
```

Examples

This is an example how the **Player** class is **intended to be used**:

Sample code usage
| ```
let peter = new Player("Peter");
console.log('Highest score: ' + peter.highestScore);
console.log(`Top 5 score: [${peter.topFiveScore}]`);
console.log('' + peter);
console.log('Score count: ' + peter.scoreCount);

peter.addScore(450);
peter.addScore(200);
console.log('Highest score: ' + peter.highestScore);
console.log(`Top 5 score: [${peter.topFiveScore}]`);
console.log('' + peter);

peter.addScore(2000);
peter.addScore(300);
peter.addScore(50);
peter.addScore(700);
peter.addScore(700);
``` |

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```
console.log('Highest score: ' + peter.highestScore);
console.log(`Top 5 score: [${peter.topFiveScore}]`);
console.log('' + peter);
console.log('Score count: ' + peter.scoreCount);

console.log();
let maria = new Player("Maria")
    .addScore(350)
    .addScore(779)
    .addScore(180);
console.log('Highest score: ' + maria.highestScores);
console.log(`Top 5 score: [${maria.topFiveScore}]`);
console.log('' + maria);
```

Corresponding output

```
Highest score: undefined
Top 5 score: []
Peter: []
Score count: 0
Highest score: 450
Top 5 score: [450,200]
Peter: [450,200]
Highest score: 2000
Top 5 score: [2000,700,700,450,300]
Peter: [2000,700,700,450,300,200,50]
Score count: 7

Highest score: 779
Top 5 score: [779,350,180]
Maria: [779,350,180]
```

Submission

Submit your class **Player** as "**JavaScript code (Mocha unit tests)** ".