SportsClub

**Grade settings**: Maximum grade: 100  
**Disable external file upload, paste and drop external content**: Yes  
**Based on**: [SportsClub](https://cognizant.tekstac.com/mod/vpl/view.php?id=80048)  
**Run**: Yes **Evaluate**: Yes  
**Automatic grade**: Yes

Achievers Sports Club use drills, strength training, speed strategies, and mechanical analysis to get each athlete performing at their optimized level. They conduct sprints every week and find the top 3 performers and reward them. The manager intimates you to help in the process. You, being a software developer, help them in developing a Java program based on the requirement.

**Component Specification: AthleteDetails Class**

|  |  |  |
| --- | --- | --- |
| **Type (Class)** | **Attributes** | **Methods** |
| **AthleteDetails** | private Map<Double, String> athleteMap | Getter and setter methods for the attribute are included in the code skeleton. |

***Note:****key:timeTaken value:athlete name for athleteMap attribute*

**Requirement 1: Find the time taken by the given athlete**

|  |  |  |
| --- | --- | --- |
| **Type (Class)** | **Methods** | **Responsibilities** |
| **AthleteDetails** | public double **findTimeTaken**(String athleteName) | This method accepts athleteName as an argument. If the athleteName is present in the Map, it must return the time taken by that athlete, else return -1.  **Note:** athleteName is case insensitive |

**Requirement 2: Filter the top 3 best performers**

|  |  |  |
| --- | --- | --- |
| **Type (Class)** | **Methods** | **Responsibilities** |
| **AthleteDetails** | public List<String> **findThreeBestPerfomers(**) | This method filters the top 3 athletes who have completed the sprint in minimum time and stores it in a list and returns the list. |

**You are provided with the main method as code template and it is excluded from evaluation.**

**Note:**

* Enter at least three athlete details as input.
* In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user, and the rest of the text represents the output.
* Ensure to follow the object-oriented specifications provided in the question description.
* Ensure to provide the names for the classes, attributes, and methods as specified in the question description.
* Adhere to the code template, if provided.

**Sample Input/Output 1:**

Enter number of athlete to be added

**5**

Enter the athlete details(TimeTaken : AthleteName)

**345:Harry**

**289:Jack**

**396:Kate**

**219:Eddy**

**308:Tim**

Enter the athlete name

**Jack**

Time taken by Jack is 289.0

3 Best performers are

Eddy

Jack

Tim

**Sample Input/Output 2:**

Enter number of athlete to be added

**6**

Enter the athlete details(TimeTaken:AthleteName)

**275:Alex**

**369:Nastya**

**248:Perry**

**319:Ginny**

**295:Barack**

**302:Mia**

Enter the athlete name

**Jiya**

Athlete Jiya is not available

3 Best performers are

Perry

Alex

Barack