

## Dæmatímaverkefni 7 – Lab 7

Skrifið forrit sem les inn upplýsingar um  $n \geq 1$  skákmenn og geymir þá í vektor. Skákmaður er með nafn (strengur með engum bilum), fæðingarár (heiltala) og skákstig (heiltala). Forritið skrifar síðan út upplýsingar um skákmennina, finnur og skrifar út stigahæsta skákmanninn (ef tveir skákmenn eru með jafn há skákstig þá telst sá fyrri hærri) og skrifar út meðalstigin.

### English description

Write a program that reads in information about  $n \geq 1$  chess players and stores them in a vector. A chess player has a name (a string without any spaces), a birth year (an integer) and chess rating (an integer). The program then displays the information about the chess players, finds and writes out the highest rated player (if two players have the same rating then the former one is considered higher) and writes out the average rating.

#### Example 1:

```
Number of players: 5
--- Reading players ---
Name: Anand
Year: 1969
Rating: 2816

Name: Nakamura
Year: 1987
Rating: 2814

Name: Carlsen
Year: 1990
Rating: 2853

Name: Caruana
Year: 1992
Rating: 2808

Name: Topalov
Year: 1975
Rating: 2816

--- Displaying players ---
Name: Anand
```

**Forritun**  
**Háskólinn í Reykjavík**

**Dæmatími: Vika 8**  
**Haustönn 2015**

Year: 1969  
Rating: 2816

Name: Nakamura  
Year: 1987  
Rating: 2814

Name: Carlsen  
Year: 1990  
Rating: 2853

Name: Caruana  
Year: 1992  
Rating: 2808

Name: Topalov  
Year: 1975  
Rating: 2816

Highest rated player:  
Name: Carlsen  
Year: 1990  
Rating: 2853

Average rating: 2821.4

**Example 2:**

Number of players: 2  
--- Reading players ---  
Name: Hrafn  
Year: 1965  
Rating: 2164

Name: Bjarni  
Year: 1985  
Rating: 2164

--- Displaying players ---  
Name: Hrafn  
Year: 1965  
Rating: 2164

Name: Bjarni  
Year: 1985  
Rating: 2164

Forritun  
Háskólinn í Reykjavík

Dæmatími: Vika 8  
Haustönn 2015

Highest rated player:  
Name: Hrafn  
Year: 1965  
Rating: 2164

Average rating: 2164