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Факультет інформатики

*Кафедра програмної інженерії*

ЛАБОРАТОРНА РОБОТА №1

з курсу

*«Системи штучного інтелекту»*

на тему: экспертна система

Виконав: Мельников Сергій

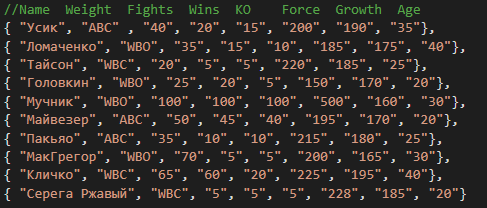
Група:21 ІПЗ

Перевірив: Гасанов А.С.

Київ, 2018

**Варіант 14**

|  |  |  |  |
| --- | --- | --- | --- |
| Команда боксеров | Фамилии боксеров | Весовая категория, число боев, число побед и др. | Кого послать на соревнование? |



using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace II

{

class Program

{

class Boxer {

public string name, weight, countOfFight, countOfWins, countOfWinsByKO, forceOfHit, growth, age;

public Boxer(string name, string weight, string countOfFight, string countOfWins, string countOfWinsByKO, string forceOfHit, string growth, string age)

{

this.name = name;

this.weight = weight;

this.countOfFight = countOfFight;

this.countOfWins = countOfWins;

this.countOfWinsByKO = countOfWinsByKO;

this.forceOfHit = forceOfHit;

this.growth = growth;

this.age = age;

}

}

static void getBoxer(Boxer[] arrOfBoxers,int[] arrOfAnswers, string q1, int q2, int q3, int q4, float q5, float q6, float q7)

{

for (var i = 0; i < arrOfBoxers.Length; i++)

{

arrOfAnswers[i] = 0;

if (arrOfBoxers[i].weight == q1) arrOfAnswers[i]++;

if (Convert.ToInt32(arrOfBoxers[i].countOfFight) == q2) arrOfAnswers[i]++;

if (Convert.ToInt32(arrOfBoxers[i].countOfWins) == q3) arrOfAnswers[i]++;

if (Convert.ToInt32(arrOfBoxers[i].countOfWinsByKO) == q4) arrOfAnswers[i]++;

if (Convert.ToDouble(arrOfBoxers[i].forceOfHit) == q5) arrOfAnswers[i]++;

if (Convert.ToDouble(arrOfBoxers[i].growth) == q6) arrOfAnswers[i]++;

if (Convert.ToDouble(arrOfBoxers[i].age) == q7) arrOfAnswers[i]++;

}

for (var i = 0; i < arrOfAnswers.Length; i++)

{

if (arrOfAnswers[i] == arrOfAnswers.Max())

Console.WriteLine(arrOfBoxers[i].name);

}

}

static void Main(string[] args)

{

string q1;

int q2, q3, q4;

float q5, q6, q7;

Boxer[] arrOfBoxers = new Boxer[10];

int[] arrOfAnswers = new int[arrOfBoxers.Length];

string[,] arrOfNames = {

//Name Weight Fights Wins KO Force Growth Age

{ "Усик", "ABC" , "40", "20", "15", "200", "190", "35"},

{ "Ломаченко", "WBO", "35", "15", "10", "185", "175", "40"},

{ "Тайсон", "WBC", "20", "5", "5", "220", "185", "25"},

{ "Головкин", "WBO", "25", "20", "5", "150", "170", "20"},

{ "Мучник", "WBO", "100", "100", "100", "500", "160", "30"},

{ "Майвезер", "ABC", "50", "45", "40", "195", "170", "20"},

{ "Пакьяо", "ABC", "35", "10", "10", "215", "180", "25"},

{ "МакГрегор", "WBO", "70", "5", "5", "200", "165", "30"},

{ "Кличко", "WBC", "65", "60", "20", "225", "195", "40"},

{ "Серега Ржавый", "WBC", "5", "5", "5", "228", "185", "20"}

};

for (var i = 0; i < arrOfBoxers.Length; i++)

arrOfBoxers[i] = new Boxer(arrOfNames[i, 0], arrOfNames[i, 1], arrOfNames[i, 2], arrOfNames[i, 3], arrOfNames[i, 4], arrOfNames[i, 5], arrOfNames[i, 6], arrOfNames[i, 7]);

Console.WriteLine("Вес");

q1 = Console.ReadLine();

Console.WriteLine("Бои");

q2 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Победы");

q3 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Победы накаутом");

q4 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Сила удара");

q5 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Рост");

q6 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Возраст");

q7 = Convert.ToInt32(Console.ReadLine());

getBoxer(arrOfBoxers, arrOfAnswers, q1, q2, q3, q4, q5, q6, q7);

Console.ReadKey();

}

}

}