“Классы”

Listing класса Student

using System;

namespace Prog1

{

class Student

{

private string name;

private int course;

public readonly string gender;

public string Name

{

get { return name; }

set { name = value; }

}

public int Course

{

get { return course; }

set { course = value; }

}

public Student(string gender)

{

this.gender = gender;

}

public override string ToString()

{

return $"Имя-- {name} Курс-- {course}, Пол-- {gender}";

}

}

}

Listing класса Worker

using System;

namespace Prog1

{

class Worker

{

private string name;

private string profession;

private int skill;

public string Name

{

get { return name; }

set { name = value; }

}

public string Profession

{

get { return profession; }

set { profession = value; }

}

public int Skill

{

get { return skill; }

set { skill = value; }

}

public override string ToString()

{

return $"Имя-- {name}-- Профессия {profession}, " +

$"Рабочий стаж-- {skill} лет";

}

}

}

Listing класса Shop

using System;

namespace Prog1

{

class Shop

{

private string cipher;

private int workers;

public string Сipher

{

get { return cipher; }

set { cipher = value; }

}

public int Workers

{

get { return workers; }

set { workers = value; }

}

public override string ToString()

{

return $"Строковый шифр-- {cipher}, " +

$"Количество работников-- {workers}";

}

}

}

Listing класса Book

using System;

namespace Prog1

{

class Book

{

private string heading;

private string[] authors;

private double price;

public string Heading

{

get { return heading; }

set { heading = value; }

}

public string[] Authors

{

get { return authors; }

set { authors = value; }

}

public double Price

{

get { return price; }

set { price = value; }

}

public override string ToString()

{

return $"Название книги-- {heading}, Авторы-- {authors[1]}, " +

$"{authors[2]}, Цена-- {price} руб.";

}

}

}

Listing класса Record\_Book

using System;

namespace Prog1

{

class Record\_Book

{

private string nameExaminee;

private string nameExaminer;

private int mark;

public string NameExaminee

{

get{ return nameExaminee; }

set{ nameExaminee = value; }

}

public string NameExaminer

{

get { return nameExaminer; }

set { nameExaminer = value; }

}

public int Mark

{

get { return mark; }

set { mark = value;}

}

public override string ToString()

{

return $"Экзаменуемый - {nameExaminee}, " +

$"Экзаменатор-- {nameExaminer}, Оценка-- {mark}";

}

}

}

Listing класса Address

using System;

namespace Prog1

{

class Address

{

private int index;

private string city;

private string street;

private int house;

private int apartment;

public int Index

{

get { return index; }

set { index = value; }

}

public string City

{

get { return city; }

set { city = value; }

}

public string Street

{

get { return street; }

set { street = value; }

}

public int House

{

get { return house; }

set { house = value;}

}

public int Apartment

{

get { return apartment; }

set { apartment = value; }

}

public override string ToString()

{

return $"Почтовый индекс-- {index}, Город-- {city}, " +

$"Улица-- {street}, Дом-- {house}, Квартира-- {apartment}";

}

}

}

Listing класса Product

using System;

namespace Prog1

{

class Product

{

private string nameProduct;

private int quantityProduct;

private int cost;

private int[] shelfLife;

public string NameProduct

{

get { return nameProduct; }

set { nameProduct = value; }

}

public int QuantityProduct

{

get { return quantityProduct; }

set { quantityProduct = value; }

}

public int Cost

{

get { return cost; }

set { cost = value; }

}

public int[] ShelfLife

{

get { return shelfLife; }

set { shelfLife = value; }

}

public override string ToString()

{

return $"Наименование-- {nameProduct}, Количество-- {quantityProduct}, " +

$"Стоимость-- {cost}, Годен до-- {shelfLife[1]}.{shelfLife[2]}.{shelfLife[3]}";

}

}

}

Listing класса Study\_group

using System;

namespace Prog1

{

class Study\_group

{

private int cipher;

private string specialty;

private int quantity;

private int yearOfFormation;

public int Сipher

{

get { return cipher; }

set { cipher = value; }

}

public string Specialty

{

get { return specialty; }

set { specialty = value; }

}

public int Quantity

{

get { return quantity; }

set { quantity = value; }

}

public int YearOfFormation

{

get { return yearOfFormation; }

set { yearOfFormation = value; }

}

public override string ToString()

{

return $"Шифр-- {cipher}, Специальность-- {specialty}, Количество студентов-- {quantity}, Год формирования-- {yearOfFormation} год.";

}

}

}

Listing класса Notes

using System;

namespace Prog1

{

class Notes

{

private string serialAndNumber;

private int denomination;

private string denominationToString;

public string SerialAndNumber

{

get { return serialAndNumber; }

set { serialAndNumber = value; }

}

public int Denomination

{

get { return denomination; }

set { denomination = value; }

}

public string DenominationToString

{

get { return denominationToString; }

set { denominationToString = value; }

}

public override string ToString()

{

return $"Серия и номер-- {serialAndNumber}, " +

$"Номинал-- {denomination} руб., " +

$"Номинал прописью-- {denominationToString} руб.";

}

}

}

Listing класса PC\_Game

using System;

namespace Prog1

{

class PC\_Game

{

private string name;

private string firm;

private int year;

private string genre;

public string Name

{

get { return name; }

set { name = value; }

}

public string Firm

{

get { return firm; }

set { firm = value; }

}

public int Year

{

get { return year; }

set { year = value; }

}

public string Genre

{

get { return genre; }

set { genre = value; }

}

public override string ToString()

{

return $"Название игры-- {name}, Компания-- {firm}, " +

$"Год издания-- {year}, Жанр-- {Genre}";

}

}

}

Listing класса Program

using System;

namespace Prog1

{

class Program

{

static void Main(string[] args)

{

char line = '\_';

//студент

Console.WriteLine(new string(line, 120));

Console.WriteLine("Студент:");

Student Alice = new Student("Женский");

Alice.Name = "Алиса";

Alice.Course = 3;

Console.WriteLine(Alice.ToString());

Console.WriteLine(new string (line, 120));

//служащий

Console.WriteLine();

Console.WriteLine("Служащий:");

Worker worker = new Worker();

worker.Name = "Михаил";

worker.Profession = "Слесарь";

worker.Skill = 25;

Console.WriteLine(worker.ToString());

Console.WriteLine(new string(line, 120));

//цех

Console.WriteLine();

Console.WriteLine("Цех:");

Shop shop = new Shop();

shop.Сipher = "GTTHIDHTEYTR";

shop.Workers = 42;

Console.WriteLine(shop.ToString());

Console.WriteLine(new string(line, 120));

//Книга

Console.WriteLine();

Console.WriteLine("Книжный магазин:");

Book book = new Book();

book.Heading = "Язык программирования C# и платформы .NET";

book.Authors = new string[3];

book.Authors[1] = "Эндрю Троелсен";

book.Authors[2] = "Филипп Джепикс";

book.Price = 4800.0;

Console.WriteLine(book.ToString());

Console.WriteLine(new string(line, 120));

//Зачёт

Console.WriteLine();

Console.WriteLine("Зачёт:");

Record\_Book record\_Book = new Record\_Book();

record\_Book.NameExaminee = "Виноградов Алексей Викторович";

record\_Book.NameExaminer = "Виктор Генадьевич Кульков";

record\_Book.Mark = 4;

Console.WriteLine(record\_Book.ToString());

Console.WriteLine(new string(line, 120));

//Адрес

Console.WriteLine();

Console.WriteLine("Адрес: ");

Address address = new Address();

address.Index = 237632;

address.City = "Волгоград";

address.Street = "Пушкина";

address.House = 21;

address.Apartment = 5;

Console.WriteLine(address.ToString());

Console.WriteLine(new string(line, 120));

//товар

Console.WriteLine();

Console.WriteLine("Товар:");

Product product = new Product();

product.NameProduct = "Сода";

product.QuantityProduct = 15;

product.Cost = 30;

product.ShelfLife = new int[5];

product.ShelfLife[1] = 12;

product.ShelfLife[2] = 06;

product.ShelfLife[3] = 3012;

Console.WriteLine(product.ToString());

Console.WriteLine(new string(line, 120));

//Учебная группа

Console.WriteLine();

Console.WriteLine("Учебная группа:");

Study\_group study\_group = new Study\_group();

study\_group.Сipher = 1253254;

study\_group.Specialty = "Повар кондитер";

study\_group.Quantity = 24;

study\_group.YearOfFormation = 2010;

Console.WriteLine(study\_group.ToString());

Console.WriteLine(new string(line, 120));

//Денежная купюра

Console.WriteLine();

Console.WriteLine("Денежная купюра:");

Notes notes = new Notes();

notes.SerialAndNumber = "ЯЭ 1167761";

notes.Denomination = 100;

notes.DenominationToString = "Сто";

Console.WriteLine(notes.ToString());

Console.WriteLine(new string(line, 120));

//Компьютерная игра

Console.WriteLine();

Console.WriteLine("Компьютерная игра:");

PC\_Game pc\_game = new PC\_Game();

pc\_game.Name = "Warcraft 3";

pc\_game.Firm = "Blizzard";

pc\_game.Year = 2002;

pc\_game.Genre = "стратегия";

Console.WriteLine(pc\_game.ToString());

Console.WriteLine(new string(line, 120));

Console.ReadKey();

}

}

}

Снимок результата работы программы

