

Preparation

Download the skeleton provided in Judge. **Do not** change the **Startup** class or its **namespace**.

Problem description

Your task is to create a repository which stores presents by creating the classes described below.

First, write a C# class **Present** with the following properties:

- **Name:** string
- **Weight:** double
- **Gender:** string

The class **constructor** should receive **name**, **weight** and **gender**. Override the **ToString()** method in the following format:

"Present {name} ({weight}) for a {gender}"

Next, write a C# class **Bag** that has **data** (a collection which stores the entity **Present**). All entities inside the repository have the **same properties**. Also, the **Bag** class should have those **properties**:

- **Color:** string
- **Capacity:** int

Next, write a C# class **Bag** that has **data** (a collection which stores the entity **Present**). All entities inside the repository have the same properties. Also, the **Bag** class should have those properties:

- **Color:** string
- **Capacity:** int

The class **constructor** should receive **color** and **capacity**, also it should initialize the **data** with a new instance of the collection. Implement the following features:

- Field **data** - collection that holds added presents
- Method **Add(Present present)** - adds an entity to the data if there is room for it
- Method **Remove(string name)** - removes a present by given name, if such exists, and returns bool
- Method **GetHeaviestPresent()** - returns the heaviest present
- Method **GetPresent(string name)** - returns the present with the given name
- Getter **Count** - returns the number of presents
- **Report()** - returns a string in the following format (print the presents in order of appearance):
 - "{color of Bag} bag contains:
 {Present1}
 {Present2}
 (...)"



Constraints

- The **names** of the presents will be **always unique**.
- You will always have a present added before receiving methods manipulating the Bag's presents.

Examples

This is an example how the **Bag** class is **intended to be used**.



Sample code usage

```
//Initialize the repository (Bag)
Bag bag = new Bag("Blue", 20);
//Initialize entity
Present present = new Present("Train", 0.4, "Boy");
//Get presents
Console.WriteLine(present); // Present Train for a Boy
//Add present
```