UML Class diagram vs Java source code

Graph

```
# caption: string
# items: array
```
```
+ Graph(string)
+ add(Item): void
+ setCaption(string): void
+ getCaption(): string
# getItemMaxNameLength(): int
# getItemMaxValue(): int
+ print(): void
```

«interface» Item

```
+ getName(): string
+ getValue(): int
+ getValueString(): string
```

StringItem

```
- name: string
- value: string
```
```
+ StringItem(string, string)
+ getName(): string
+ getValue(): int
+ getValueString(): string
```

RowGraph

```
- symbol: string
- maxValueSymbolCount: int
```
```
+ AsciiLineGraph(string)
+ configure(string, int): void
+ print(): void
```

IntItem

```
- name: string
- value: int
```
```
+ IntItem(string, int)
+ getName(): string
+ setName(string): void
+ getValue(): int
+ setValue(int): void
+ getValueString(): string
```

GraphApp

```java
public interface Item {
    public String getName();
    public int getValue();
    public String getValueString();
}
```

```java
public abstract class Graph {
    protected String caption;
    protected List<Item> items;
    public Graph(String value) {…}
    public void add(Item item) {…}
    public void setCaption(String value) {…}
    public String getCaption() {…}
    protected int getItemMaxValue() {…}
    protected int getItemMaxNameLength() {…}
    public abstract void print();
}
```

```java
public final class IntItem implements Item {
    private String name;
    private int value;
    public IntItem(String name, int value) {…}
    public String getName() {…}
    public void setName(String name) {…}
    public int getValue() {…}
    public void setValue(int value) {…}
    public String getValueString() {…}
}
```

```java
public final class StringItem implements Item {
    private String name;
    private String value;
    public StringItem(String name, String value) {…}
    public String getName() {…}
    public int getValue() {…}
    public String getValueString() {…}
}
```

```java
public class RowGraph extends Graph {
    private static char symbol = '#';
    private static int maxValueSymbolCount = 70;
    public RowGraph(String value) {…}
    public RowGraph() {…}
    public static void configure(char symbol, int maxValueSymbolCount) {….}
    public void print() {…}
}
```

```java
public class GraphApp {
    public static void main(String[] args) {…}
}
```