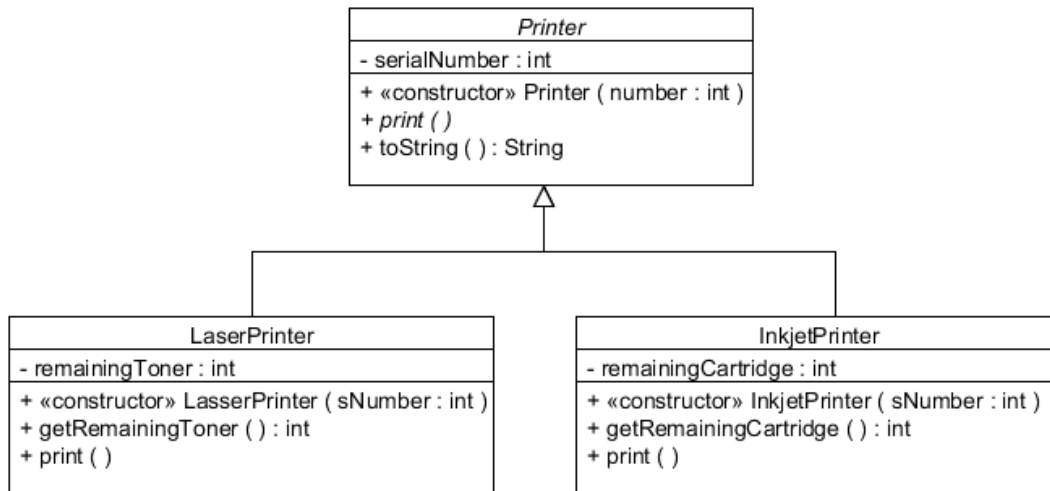


Create a class called PrinterApp as well as the following three classes as specified in the class diagrams.

Notice that the class name *Printer* and its method *print* are spelled in **italic**.

This indicates that *Printer* is an **abstract class** and *print* is an **abstract method**.



### Ad Printer:

*Printer* is an **abstract class** and *print* is an **abstract method**.

The method **toString** returns a string of the following form:

className #idNumber (e.g. InkjetPrinter #1234567 or LaserPrinter #2345678 )

### Ad LaserPrinter / InkjetPrinter:

In the **constructor** do the following:

- Set the value of remainingToner / remainingCartridge to 100 (100% full when new) and initialize the base class

In **method print** do the following:

- If the remainingToner / remainingCartridge is greater 0 reduces the value by 10

It also prints a message that informs the user that the printer is printing and how much toner / cartridge is left.

e.g.: LaserPrinter is printing. Remaining toner: 90%

e.g.: InkjetPrinter is printing. Remaining cartridge: 80%

- If the field is 0 print a message that the toner / cartridge is empty. Do NOT subtract anything from 0.

### PrinterApp:

- Create an instance of InkjetPrinter
- Print the instance
- Print how much cartridge is remaining
- Create an instance of LaserPrinter
- Print the instance
- Print how much toner is remaining
- Print a label "List of Printer: "
- Create an **ArrayList** of printers and add the two printer instances you just created
- User a foreach loop to loop through all the printers
- Print the instance, make the printer print **11** times
- print an empty line
- Compile and run

```
InkjetPrinter #1234567
Remaining Cartridge: 100%
```

```
LaserPrinter #2345678
Remaining Toner: 100%
```

```
List of Printers:
InkjetPrinter #1234567
InkjetPrinter is printing. Remaining cartridge: 90%
. . .
InkjetPrinter is printing. Remaining cartridge: 0%
Cartridge is empty
```

```
LaserPrinter #2345678
LaserPrinter is printing. Remaining toner: 90%
. . .
LaserPrinter is printing. Remaining toner: 0%
Toner is empty
```