

Task 10

Create three classes:

- **CalculatingDevice** with a sole constructor taking a name (**String**). The class defines also a method

```
public String calculate(double x, double y)
```

which calculates the sum of its arguments and returns *a string* (not a number) with the name of the machine and the result of the addition.

Add a static method

```
public static void printRes(CalculatingDevice[] a,
                           double x, double y)
```

taking an array of calculataing machines and arguments *x* and *y* — the functions prints the results of calculations with these arguments for each machine from the array.

- **Calculator** extending **CalculatingDevice** and overriding the **calculate** method. The method gets the result of addition by invoking `super.calculate` and adds the result of subtraction (as a string).
- **Computer** extending **Calculator** and overriding the **calculate**. The method gets the result of addition and subtraction by invoking `super.calculate` and adds, as a string, the results of multiplication and division.

The following program

[download Computers.java](#)

```
public class Computers {
    public static void main (String[] args) {
        CalculatingDevice[] arr = {
            new Computer("Cray"),
            new CalculatingDevice("Abacus"),
            new Calculator("HP")
        };
        CalculatingDevice.printRes(arr, 21, 7);
    }
}
```

should print something like

```
Cray: 21.0+7.0=28.0; 21.0-7.0=14.0; 21.0*7.0=147.0; 21.0/7.0=3.0
Abacus: 21.0+7.0=28.0
HP: 21.0+7.0=28.0; 21.0-7.0=14.0
```

Deadline: Jun 24 (inclusive)

Put your Java file(s), and only Java files, in a directory the name of which is your surname (without Polish or any other non-ASCII characters). Names of Java files are arbitrary, although of course they should correspond to names of classes you created. Zip the whole directory (“from above” — not just the files inside it). Then drop the zip file created in this way into folder “Tasks / Task_XX” of the GAKKO system (where ‘XX’ is the task number).