

Industrial Software Development (ISDe)

Exercise 3 (45 min)

USE THE OBSERVER DESIGN PATTERN

Use abstract classes if needed.

A **Printer** object has two methods, **process_1()** and **process_2()**, which behave differently on working day or on weekend.

working day:

process_1(el) prints the character **el**,

process_2(el) prints the UPPERCASE character [**el.upper()**]

weekend:

process_1(el) prints the UPPERCASE character [**el.upper()**] if **el** is not a number, otherwise it prints the number and the string '-> IT IS A NUMBER!'

process_2(el) prints the string ' **ASCII ->** ', and the ASCII code [ord(**el**)]

The assigned code [**main.py** and **printer.py**] solves the problem using the STRATEGY DESIGN PATTERN

New requirements

Different observers **s_1**, ... , **s_n** may be interested in a **change of strategy**.

If the strategy changes, the **interested** observers must print

```
's_1 -> New Strategy!'
's_2 -> New Strategy!'
```

If an observer (i.e., **s_1**) is no more interested in the event, when the strategy changes the output will be

```
's_2 -> New Strategy!'
```

Complete the module **printer.py** and the **main.py**.

The assigned **main.py** contains (as a comment) the correct, expected output.

Be sure to submit both the **main** and the **module**. Your program must work correctly and produce the correct output.