

CSE 259 Fall 2019

Project 1

online

1. Project description

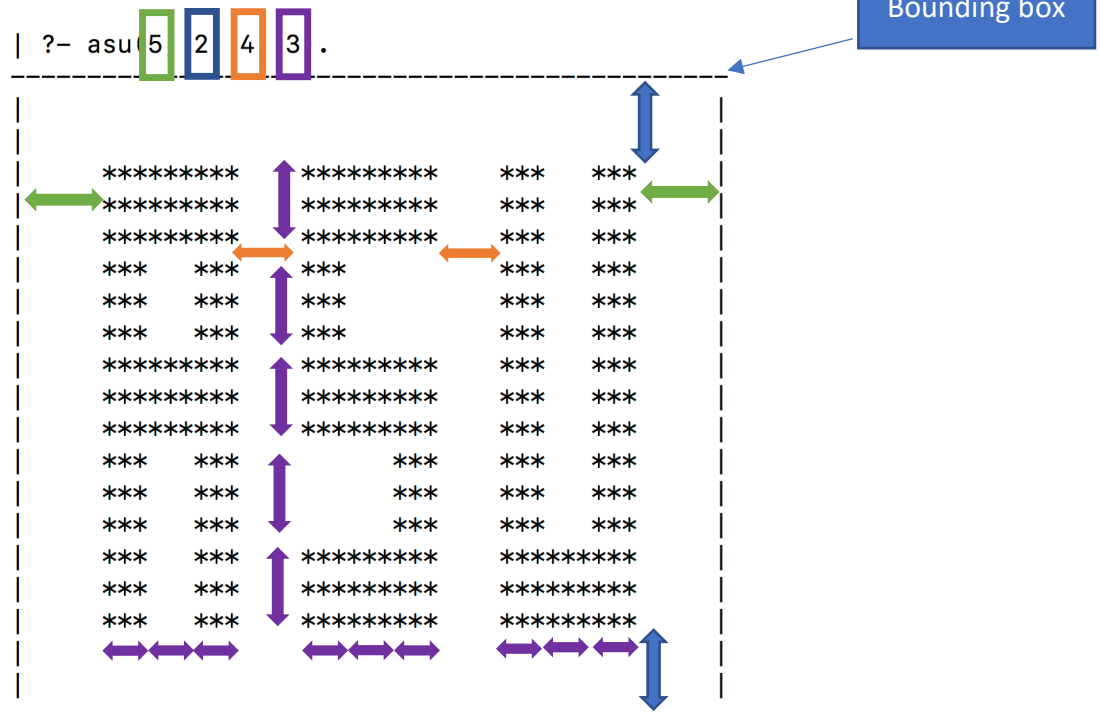
In this project, we are going to implement a prolog program that writes out ASU in various settings! Given that most of you are not familiar with prolog yet, we will make this project a *small team project* (1-3 students per team). Happy prolog!

2. Requirement specification:

In this project, you must implement the following predicate in prolog:

`| ?- asu(LeftRightMargin, BottomTopMargin, SpaceBetweenCharacters, FontSize).`

Below is an example output that is expected of your program. Notice that the unit is given in *text length or width*, depending on whether it specifies horizontal or vertical space.



true ? a

(1 ms) no

Here is another example:

```
| ?- asu(1, 3, 10, 2).
```

```
*****          *****          **  **
*****          *****          **  **
**  **          **          **  **
**  **          **          **  **
*****          *****          **  **
*****          *****          **  **
**  **          **          **  **
**  **          **          **  **
**  **          *****          *****
**  **          *****          *****
```

```
true ? a
```

```
(1 ms) no
```

That's it!

3. Submission:

Submission is *electronically* via canvas in a zip file. **One and only one** member must submit the file. It should contain the following files:

- README.txt: this file should include names of you team members *and* each of your contributions; be precise
- asu.pl: your code; make sure to test it thoroughly and *comment* properly.

4. Grading:

Grading will be based on the following criteria:

- Whether you code satisfies the functional requirements (70%).
- Boundary case checking (10%)
- Comment (20%)

Note that your contribution to the team *will be factored* into your project grade so be active!

5. Hints:

- You will need to use arithmetic operations a lot (see lecture slides on gprolog or the gprolog manual); to assign a numerical value to a variable, use, for example, “X is 3”.
- Use gprolog output function, “*write*(Characters)”, to write characters to the terminal
- To express OR, use “;”. For example, “(a; b)” will return true if either a or b can be proven.