CSE 259 Fall 2025

Project 1

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* (*2-3* 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.
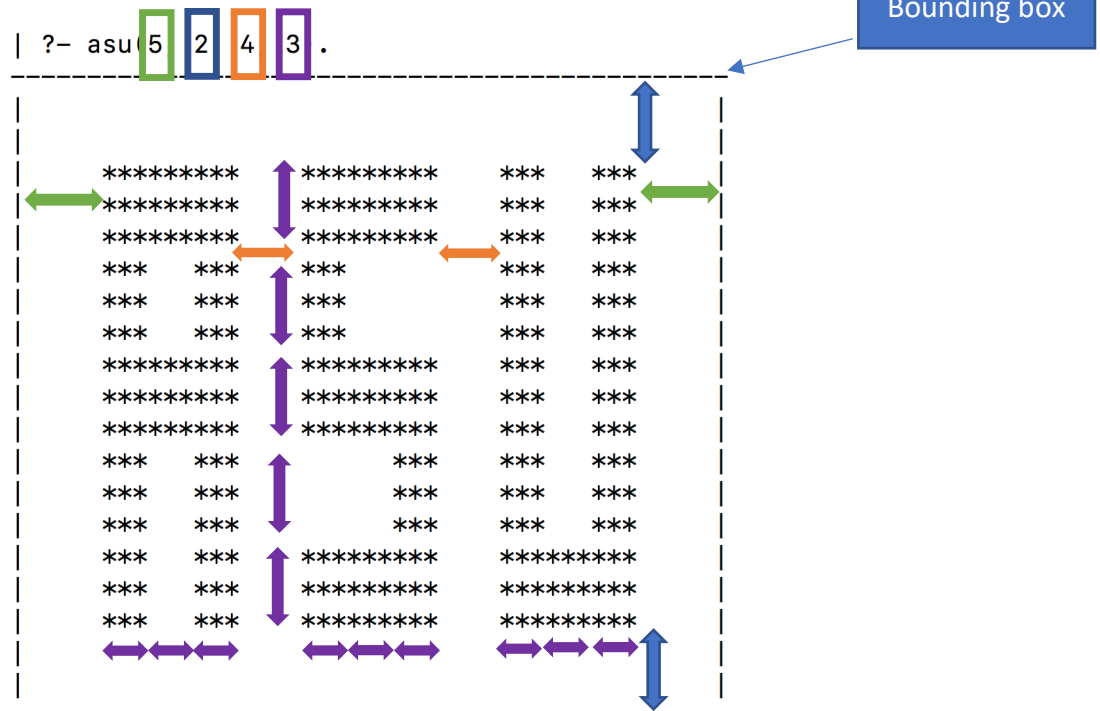
Here is another example:

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

|                                          |
|                                          |
|                                          |
|  ******        ******        **    **    |
|  ******        ******        **    **    |
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|                                          |
|                                          |
|                                          |
_____
```

That's it! For boundary cases, where it is not possible to draw, print "false". If your code print some of the output and then prints "false" then it will be considered as failed

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:

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

4. Grading:

Grading will be based on the following criteria:
  a. Whether you code satisfies the functional requirements (70%).
  b. Boundary case checking (10%)
  c. Comment (20%)

5. Hints:

  a. **There are four boundary case**. Each will contain 2.5% (of the 10% marks assigned). Check them before you start drawing.
  b. Drawing the box and 'A' will be shown in the class. Follow that to draw the other characters.
  c. Get a piece of paper and a pen. Use a fixed size of font-size and draw. Try to come up with formulas using that and you will realize that having a fixed font makes it easier to generalize the formulas (so that any values we pass work!)