Mission Sidequest 2.1: Runic Carpets

Start date: 28 August 2017
Due: 3 September 2017, 23:59

Readings:

- Textbook Sections 1.1.1 to 1.1.4

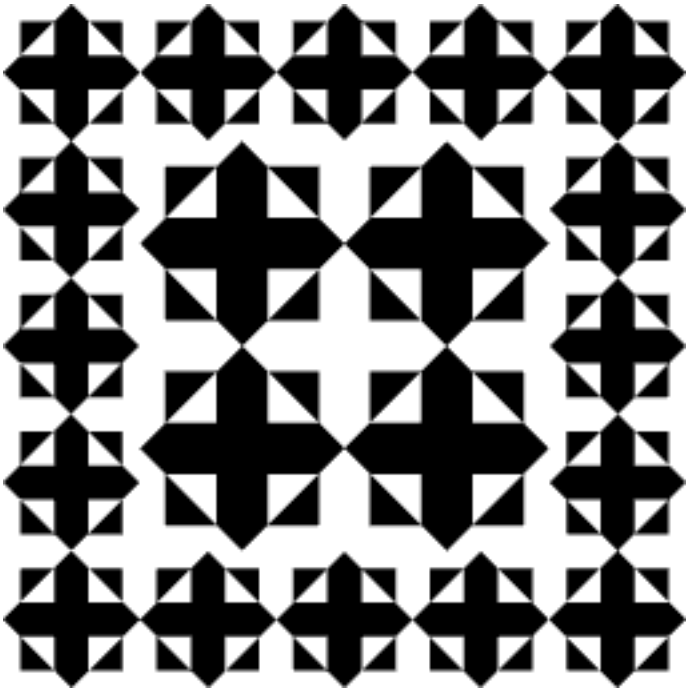
Background

As you wander along the endless hallways of the Academy, you notice several decorative rugs. Upon questioning an instructor, you learn that these ornamental rugs are of Persian origin and that the patterns can be represented by runes. . .

This side quest utilizes the rune_2d script library and consists of only **one** task.
Click here for the link to the template on the playground

Task 1:

Observing the nearest Persian rug, you notice that it exhibits 5 repeating patterns on every edge with the centre hollow filled with another closely related pattern:

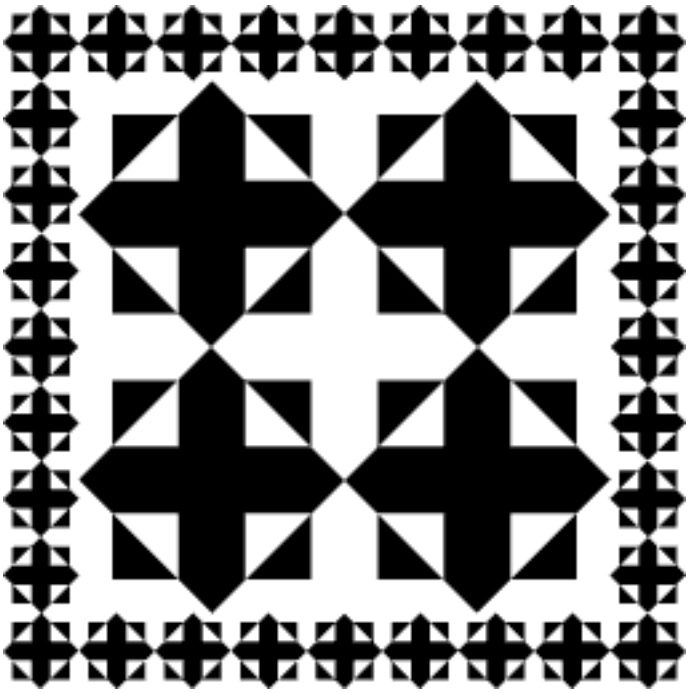


However, there are other Persian rugs that sports different numbers of repeating patterns. Write a function `persian` that takes n as an argument and creates runic representations of these Persian rugs with different numbers of repetitions at the edges, where n >= 3.

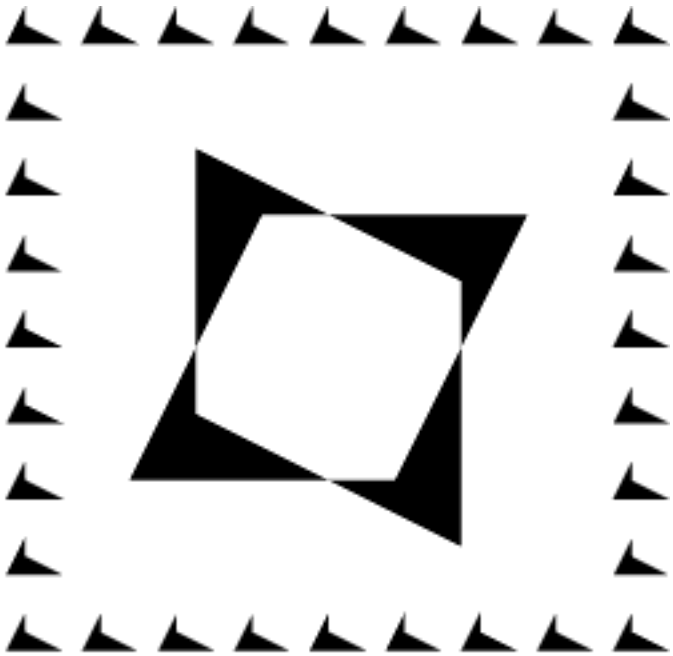
In particular, the above picture can be created with:

```
show(persian(make_cross(rcross_bb), 5));
```

As you take a quick glance at the other Persian rugs, you realise that the centre pattern is composed of the base pattern in differing orientations. The particular arrangement that is used seems familiar to you, but you seem to be unable to clearly recall it.



```
show(persian(make_cross(rcross_bb), 9));
```



```
show(persian(nova_bb, 9));
```

More examples. (a) is the same as previous example but with n = 9, (b) demonstrates an assymetrical pattern (e.g. `nova_bb`*).*

Submission

To submit your work for this sidequest, copy the url on your browser and email it to your respective Avengers. Strictly adhere to the deadline set at the start of this file.

IMPORTANT: Make sure that everything for your programs to work is on the left hand side (source code) and not in the interpreter! This is because only that code is preserved when opening the url you have emailed to us.