

# SWISH

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This assignment is **individual**.

**Deadline:** The deadline is **October 23, 2020, 11:59pm** and it is strict.

**Submission:** Please, submit your solution in Canvas as a single text file.

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## 1 SWISH

In this exercise we are going to solve a puzzle using Prolog. For that, you are going to use an online editor called SWISH [1]. The website also provides users with examples and tutorials; check, for instance, the Einstein's Riddle example.

For this exercise, let's suppose a group of 4 friends (p1, p2, p3 and p4). Each of them drives a different vehicle (motorbike, car, lorry, bus), has the corresponding driving license (A,B,C,D). Each of them lives either in a house or an apartment and goes to vacation either to mountains, beach or countryside.

We know that two people are neighbors if they live in the same type of housing. Furthermore, we know the following facts:

- F1 p1 lives in a house;
- F2 p4 has license C;
- F3 p3 has license A;
- F4 The person with license A goes to the beach;
- F5 The bus driver goes to the mountains;
- F6 The bike driver has license A, the car driver has license B, the lorry driver has license C, and the bus driver has license D;
- F7 The person who has license B lives in a house and goes to the beach;
- F8 The lorry driver does not live in a house and spends the holidays in the country;
- F9 p2 and p4 are neighbors;
- F10 The person who drives a motorcycle is a neighbour of p2, but not of p1;
- F11 A neighbour of p3 has license C;

Download the file **SWISH.txt** from Canvas and paste its contents in the online editor [1]. The skeleton of the problem is ready. Your task is to fill in the missing facts.

**How to submit:** Under the assignment SWISH, upload SWISH.txt. Make sure that your submitted file does not contain syntax errors.

## REFERENCES

- [1] An online Prolog editor and solver, <https://swish.swi-prolog.org/>