



```
#####
      HFFG
S : starting point, safe
F : frozen surface, safe
H : hole, fall to your doom
G : goal, where the frisbee is located
The episode ends when you reach the goal or fall in a hole.
You receive a reward of 1 if you reach the goal, and zero otherwise.

#####
```

The Dynamic Programming Setting

Environments in OpenAI Gym are designed with the reinforcement learning setting in mind. For this reason, OpenAI Gym does not allow easy access to the underlying one-step dynamics of the Markov decision process (MDP).

Towards using the FrozenLake environment for the dynamic programming setting, we had to first download the [file](#) containing the `FrozenLakeEnv` class. Then, we added a single line of code to share the one-step dynamics of the MDP with the agent.

```
# obtain one-step dynamics for dynamic programming setting
self.P = P
```

The new `FrozenLakeEnv` class was then saved in a Python file **frozenlake.py**, which we will use (instead of the original OpenAI Gym file) to create an instance of the environment.

