



```
""""
```

```
Winter is here. You and your friends were tossing around a frisbee around the lake  
when you made a wild throw that left the frisbee out in the middle of the lake.  
The water is mostly frozen, but there are a few holes where the ice is missing.  
If you step into one of those holes, you'll fall into the freezing water.  
At this time, there's an international frisbee shortage, so it's urgent  
you navigate across the lake and retrieve the disc.
```

```
However, the ice is slippery, so you won't always move in the direction you  
intend. The surface is described using a grid like the following
```

```
SFFF
```

```
FHFH
```

```
FFFH
```

```
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