Islamic University of Technology

Artificial Intelligence Lab

CSE 4712

Lab 1

Author:
Ishmam Tashdeed
CSE, IUT

Contents

1 Tasks **2**
1.1 Task 1 2
1.2 Task 2 2

1 Tasks

1.1 Task 1

Find the coordinates of the `start` and `stop` locations from the maze. The maze will be a `string` object. Your have to:

- Load the maze into a list.
- Print the coordinates of start `S` and goal `G`.
- (Bonus) Print whether it is possible to reach the goal from the start.

Sample Input:

```
########
#S.....#
#..##..#
#..#..G#
########
```

Sample Output:

```
Start: 1, 1
End: 3, 6
(Bonus) Possible to reach goal?: Yes
```

1.2 Task 2

Implement a custom data structure class named `FrequencyMap`. This class should:

- Take a list of words in the constructor.
- Build a dictionary mapping each word to its frequency.
- Have a method named `most_common()`, returning the word with the highest frequency.

Sample Input:

```
f = FrequencyMap(["apple", "banana", "apple", "apple", "pear"
    ])
```

Sample Output:

```
f.most_common()
>> apple
```