

HW2

3

Move 0

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [], 'Wampa?': [(1, 0), (0, 1)], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 0)], 'Visited': [], 'GridSize': [inf, inf], 'Path': ['climb'], 'JustShot': False}
```

shoot

```
(True, [1, 1], 'Blaster bolt was shot')
```

Move 1

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [], 'Wampa?': [], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(1, 0), (0, 1), (0, 0)], 'Visited': [], 'GridSize': [inf, inf], 'Path': ['climb'], 'JustShot': False}
```

forward

```
(True, [2, 1], [None, 'breeze', None, None, 'scream'])
```

Move 2

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?': [], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward'], 'JustShot': False}
```

left

```
(True, [2, 1], 'up')
```

Move 3

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':
[], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0),
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf],
'Path': ['climb', 'forward', 'left'], 'JustShot': False}
left
(True, [2, 1], 'left')
```

Move 4

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':
[], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1), (0, 0),
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf],
'Path': ['climb', 'forward', 'left', 'left'], 'JustShot': False}
forward
(True, [1, 1], [None, None, None, None, 'scream'])
```

Move 5

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':
[], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0),
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf,
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward'],
'JustShot': False}
left
(True, [1, 1], 'down')
```

Move 6

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':
[], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1), (0, 0),
```

```
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left'], 'JustShot': False}
```

left

```
(True, [1, 1], 'right')
```

Move 7

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?': [], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left'], 'JustShot': False}
```

left

```
(True, [1, 1], 'up')
```

Move 8

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?': [], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left'], 'JustShot': False}
```

forward

```
(True, [1, 2], [None, 'breeze', None, None, 'scream'])
```

Move 9

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0), (0, 2)], 'Wampa?': [], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward'], 'JustShot':
```

False}

Backtracking

left

(True, [1, 2], 'left')

Move 10

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0), (0, 2)],
'Wampa?': [], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left'],
'JustShot': False}
```

Backtracking

left

(True, [1, 2], 'down')

Move 11

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0), (0, 2)],
'Wampa?': [], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left'],
'JustShot': False}
```

Backtracking

forward

(True, [1, 1], [None, None, None, None, 'scream'])

Move 12

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0), (0, 2)],
'Wampa?': [], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1),
```

```
(0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0),
(0, 1), (0, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left',
'left', 'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

left

```
(True, [1, 1], 'right')
```

Move 13

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0), (0, 2)],
'Wampa?': [], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1),
(0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0),
(0, 1), (0, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left',
'left', 'forward', 'left'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [2, 1], [None, 'breeze', None, None, 'scream'])
```

Move 14

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (2, 0), (0, 2)],
'Wampa?': [], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1),
(0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0),
(0, 1), (0, 0), (1, 0)], 'GridSize': [inf, inf], 'Path': ['climb',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'left', 'left', 'forward', 'left', 'forward'], 'JustShot':
False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [3, 1], [None, None, None, None, 'scream'])
```

Move 15


```

'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward',
'forward', 'forward'], 'JustShot': False}
left
(True, [4, 1], 'up')
Move 18
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x000000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (2, 0), (3, 0), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0)], 'GridSize': [3, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'forward', 'forward', 'left'], 'JustShot': False}
forward
(True, [4, 2], [None, None, None, None, 'scream'])
Move 19
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x000000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (0, 2), (1, 0), (3, 2)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1)], 'GridSize': [3, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'forward', 'forward', 'left', 'forward'], 'JustShot': False}
forward
(True, [4, 3], [None, None, None, None, 'scream'])
Move 20
{'S<->W': <function Agent.__init__.<locals>.<lambda> at

```

```
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (2, 0), (3, 0),  
(3, 3), (2, 2), (1, 0), (3, 2)], 'NotWampa': [(0, 1), (4, 0), (2, 1),  
(0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (0, 2), (3, 3), (2, 2), (1, 0),  
(3, 2)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),  
(3, 0), (4, 0), (3, 1), (3, 2)], 'GridSize': [3, inf], 'Path':  
['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'forward', 'left', 'forward', 'forward'], 'JustShot': False}  
forward  
(True, [4, 4], [None, None, None, None, 'scream'])
```

Move 21

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2)], 'NotWampa': [(0, 1),  
(4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3),  
(0, 2), (3, 3), (2, 2), (1, 0), (3, 2)], 'Visited': [(1, 0), (0, 0),  
(0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3,  
3)], 'GridSize': [3, inf], 'Path': ['climb', 'forward', 'left', 'left',  
'forward', 'left', 'left', 'left', 'forward', 'left', 'left',  
'forward', 'left', 'forward', 'forward', 'forward', 'forward', 'left',  
'forward', 'forward', 'forward'], 'JustShot': False}  
forward  
(False, [4, 4], [None, None, None, 'bump', 'scream'])
```

Move 22

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2)], 'NotWampa': [(0, 1),
```



```
(4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3),
(0, 2), (3, 3), (2, 2), (1, 0), (3, 2)], 'Visited': [(1, 0), (0, 0),
(0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3),
(3, 4)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left',
'forward', 'left', 'forward', 'forward', 'forward', 'forward', 'left',
'forward', 'forward', 'forward', 'forward'], 'JustShot': False}
```

left

```
(True, [4, 4], 'left')
```

Move 23

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2)], 'NotWampa': [(0, 1),
(4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3),
(0, 2), (3, 3), (2, 2), (1, 0), (3, 2)], 'Visited': [(1, 0), (0, 0),
(0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3),
(3, 4)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left',
'forward', 'left', 'forward', 'forward', 'forward', 'forward', 'left',
'forward', 'forward', 'forward', 'forward', 'left'], 'JustShot': False}
```

forward

```
(True, [3, 4], [None, None, 'gasp', None, 'scream'])
```

Move 24

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,
```

```
1), (3, 2), (3, 3), (3, 4), (2, 3)], 'GridSize': [3, 3], 'Path':  
['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'forward', 'left', 'forward', 'forward', 'forward',  
'forward', 'left', 'forward'], 'JustShot': False}
```

grab

```
(True, [3, 4], 'R2-D2 has picked up Luke')
```

Move 25

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'forward', 'left', 'forward', 'forward',  
'forward', 'forward', 'left', 'forward', 'left', 'left'], 'JustShot':  
False}
```

right

```
(True, [3, 4], 'up')
```

Move 26

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,
```

```
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'forward', 'forward', 'forward', 'left', 'forward', 'forward',
'forward', 'forward', 'left', 'forward', 'left'], 'JustShot': False}
right
(True, [3, 4], 'right')
```

Move 27

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x000000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'forward', 'forward', 'forward', 'left', 'forward', 'forward',
'forward', 'forward', 'left', 'forward'], 'JustShot': False}
forward
(True, [4, 4], [None, None, None, None, 'scream'])
```

Move 28

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x000000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],
```

```
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'forward', 'left', 'forward', 'forward',  
'forward', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [4, 4], 'down')
```

Move 29

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'forward', 'left', 'forward', 'forward',  
'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 3], [None, None, None, None, 'scream'])
```

Move 30

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
```

```

'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'forward', 'forward', 'forward', 'left', 'forward', 'forward',
'forward'], 'JustShot': False}

forward

(True, [4, 2], [None, None, None, None, 'scream'])

Move 31

{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0), (3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'forward', 'forward'], 'JustShot': False}

forward

(True, [4, 1], [None, None, None, None, 'scream'])

Move 32

{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0), (3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'forward', 'forward'], 'JustShot': False}

```

```
'forward', 'forward', 'forward', 'left', 'forward'], 'JustShot': False}
```

```
forward
```

```
(False, [4, 1], [None, None, None, 'bump', 'scream'])
```

```
Move 33
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'forward', 'left'], 'JustShot': False}
```

```
right
```

```
(True, [4, 1], 'left')
```

```
Move 34
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'forward'], 'JustShot': False}
```

```
forward
```

```
(True, [3, 1], [None, None, None, None, 'scream'])
```

Move 35

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0), (3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [2, 1], [None, 'breeze', None, None, 'scream'])
```

Move 36

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0), (3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 1], [None, None, None, None, 'scream'])
```

Move 37

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0), (3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward'], 'JustShot': False}
```

```
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward'],  
'JustShot': False}
```

forward

```
(False, [1, 1], [None, None, None, 'bump', 'scream'])
```

Move 38

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left'], 'JustShot':  
False}
```

right

```
(True, [1, 1], 'up')
```

Move 39

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':
```



```
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 2], [None, 'breeze', None, None, 'scream'])
```

Move 40

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0), (3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left'], 'JustShot': False}
```

right

```
(True, [1, 2], 'right')
```

Move 41

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0), (3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
```

```
'left', 'forward', 'left'], 'JustShot': False}

right
(True, [1, 2], 'down')

Move 42
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0), (3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward'], 'JustShot': False}

forward
(True, [1, 1], [None, None, None, None, 'scream'])

Move 43
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0), (3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'left'], 'JustShot': False}

right
(True, [1, 1], 'left')

Move 44
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
```

```
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',  
'left'], 'JustShot': False}  
right  
(True, [1, 1], 'up')
```

Move 45

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left'],  
'JustShot': False}  
right  
(True, [1, 1], 'right')
```

Move 46

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,
```

```
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward'], 'JustShot':  
False}
```

forward

```
(True, [2, 1], [None, 'breeze', None, None, 'scream'])
```

Move 47

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left', 'left'], 'JustShot': False}
```

right

```
(True, [2, 1], 'down')
```

Move 48

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0),  
(3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3,  
0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited':  
[(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3],  
'Path': ['climb', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [2, 1], 'left')
```

Move 49

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0), (3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 1], [None, None, None, None, 'scream'])
```

Move 50

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (2, 0), (3, 0), (2, 3), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (3, 4), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 1), (3, 2), (3, 3), (3, 4), (2, 3), (1, 3)], 'GridSize': [3, 3], 'Path': ['climb'], 'JustShot': False}
```

climb

```
(True, [1, 1], 'Congrats! R2 has saved Luke! +1000 points! Your final
score: 949')
```

Move 0

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [], 'Wampa?': [], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(1, 0), (0, 1), (0, 0)], 'Visited': [], 'GridSize': [inf, inf], 'Path': ['climb'], 'JustShot':
```

```

False}
forward
(True, [2, 1], [None, 'breeze', None, None, None])
Move 1
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?': [], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward'], 'JustShot': False}
left
(True, [2, 1], 'up')
Move 2
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?': [], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left'], 'JustShot': False}
left
(True, [2, 1], 'left')
Move 3
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?': [], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left'], 'JustShot': False}
forward
(True, [1, 1], [None, None, None, None, None])
Move 4
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?': [], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'left'], 'JustShot': False}

```

```
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':  
[], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf,  
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward'],  
'JustShot': False}
```

left

(True, [1, 1], 'down')

Move 5

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':  
[], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf,  
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left'],  
'JustShot': False}
```

left

(True, [1, 1], 'right')

Move 6

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':  
[], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf,  
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',  
'left'], 'JustShot': False}
```

left

(True, [1, 1], 'up')

Move 7

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':  
[], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf,
```

```
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',  
'left', 'left'], 'JustShot': False}
```

forward

```
(True, [1, 2], ['stench', None, None, None, None])
```

Move 8

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(2, 0)], 'Wampa?': [(0, 2)],  
'NotPit': [(0, 1), (0, 0), (1, 1), (0, 2), (1, 0)], 'NotWampa': [(0,  
1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0), (0,  
1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'left', 'forward'], 'JustShot':  
False}
```

shoot

```
(True, [1, 2], 'Blaster bolt was shot')
```

Move 9

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(2, 0)], 'Wampa?': [],  
'NotPit': [(0, 1), (0, 0), (1, 1), (0, 2), (1, 0)], 'NotWampa': [(0,  
1), (0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0,  
0), (0, 1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'left', 'left', 'forward', 'left', 'left', 'left', 'forward'],  
'JustShot': False}
```

forward

```
(True, [1, 3], [None, None, None, None, 'scream'])
```

Move 10

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(2, 0)], 'Wampa?': [],  
'NotPit': [(0, 1), (1, 2), (0, 0), (1, 1), (0, 3), (0, 2), (1, 0)],  
'NotWampa': [(0, 1), (1, 2), (0, 0), (1, 1), (0, 3), (2, 0), (0, 2),  
(1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2)], 'GridSize': [inf,
```



```
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',  
'left', 'left', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 4], [None, None, None, None, 'scream'])
```

Move 11

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(2, 0)], 'Wampa?': [],  
'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (0, 2), (1,  
0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 0), (0, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0,  
1), (0, 2), (0, 3)], 'GridSize': [inf, inf], 'Path': ['climb',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(False, [1, 4], [None, None, None, 'bump', 'scream'])
```

Move 12

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(2, 0)], 'Wampa?': [],  
'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (0, 2), (1,  
0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 0), (0, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0,  
1), (0, 2), (0, 3), (0, 4)], 'GridSize': [inf, 3], 'Path': ['climb',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'forward', 'forward'], 'JustShot': False}
```

left

```
(True, [1, 4], 'left')
```

Move 13

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(2, 0)], 'Wampa?': [],  
'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (0, 2), (1,
```

```
(0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (0, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4)], 'GridSize': [inf, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left'], 'JustShot': False}
left
```

```
(True, [1, 4], 'down')
```

Move 14

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(2, 0)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (0, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4)], 'GridSize': [inf, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left'], 'JustShot': False}
left
```

```
(True, [1, 4], 'right')
```

Move 15

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(2, 0)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (0, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4)], 'GridSize': [inf, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left'], 'JustShot': False}
```

forward

```
(True, [2, 4], [None, None, None, None, 'scream'])
```

Move 16

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(2, 0)], 'Wampa?': [],  
'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0,  
2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1,  
1), (0, 3), (2, 0), (2, 3), (0, 2), (1, 0), (1, 3)], 'Visited': [(1,  
0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3)], 'GridSize': [inf,  
3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',  
'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left',  
'left', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [3, 4], [None, 'breeze', None, None, 'scream'])
```

Move 17

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3)], 'GridSize': [inf, 3], 'Path': ['climb', 'forward',  
'left', 'left', 'forward', 'left', 'left', 'left', 'forward',  
'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward',  
'forward'], 'JustShot': False}
```

Backtracking

left

```
(True, [3, 4], 'up')
```

Move 18

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,
```

```
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3)], 'GridSize': [inf, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left'], 'JustShot': False}
```

Backtracking

left

```
(True, [3, 4], 'left')
```

Move 19

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3)], 'GridSize': [inf, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left'], 'JustShot': False}
```

Backtracking

forward

```
(True, [2, 4], [None, None, None, None, 'scream'])
```

Move 20

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,
```

```
4), (1, 3), (2, 3), (1, 3)], 'GridSize': [inf, 3], 'Path': ['climb',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward'], 'JustShot': False}  
left
```

```
(True, [2, 4], 'down')
```

Move 21

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3)], 'GridSize': [inf, 3], 'Path': ['climb',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward', 'left'], 'JustShot':  
False}
```

forward

```
(True, [2, 3], [None, 'breeze', 'gasp', None, 'scream'])
```

Move 22

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2)], 'GridSize': [inf, 3], 'Path':  
['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward'],
```

```
'JustShot': False}
```

```
grab
```

```
(True, [2, 3], 'R2-D2 has picked up Luke')
```

```
Move 23
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left'], 'JustShot': False}
```

```
right
```

```
(True, [2, 3], 'left')
```

```
Move 24
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left'], 'JustShot': False}
```

```
right
```

```
(True, [2, 3], 'up')
```

Move 25

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [2, 4], [None, None, None, None, 'scream'])
```

Move 26

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward'], 'JustShot': False}
```

right

```
(True, [2, 4], 'right')
```

Move 27

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.
```

```
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward'], 'JustShot':  
False}
```

forward

```
(True, [3, 4], [None, 'breeze', None, None, 'scream'])
```

Move 28

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left'], 'JustShot': False}
```

right

```
(True, [3, 4], 'down')
```

Move 29

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,
```



```
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [3, 4], 'left')
```

Move 30

```
{'S->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'B->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [2, 4], [None, None, None, None, 'scream'])
```

Move 31

```
{'S->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'B->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward'], 'JustShot': False}
```

forward

(True, [1, 4], [None, None, None, None, 'scream'])

Move 32

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left'], 'JustShot': False}
```

right

(True, [1, 4], 'up')

Move 33

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'forward', 'left', 'left'], 'JustShot': False}
```

right

(True, [1, 4], 'right')

Move 34

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.
```

```
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'forward', 'forward', 'left'],  
'JustShot': False}
```

right

```
(True, [1, 4], 'down')
```

Move 35

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 3], [None, None, None, None, 'scream'])
```

Move 36

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],
```

```
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 2], [None, None, None, None, 'scream'])
```

Move 37

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 1], [None, None, None, None, 'scream'])
```

Move 38

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward'], 'JustShot': False}
```

forward

```
(False, [1, 1], [None, None, None, 'bump', 'scream'])
```

Move 39

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.
```

```
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left'], 'JustShot': False}
```

right

```
(True, [1, 1], 'left')
```

Move 40

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',  
'left'], 'JustShot': False}
```

right

```
(True, [1, 1], 'up')
```

Move 41

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,  
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0,  
4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1,  
0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0,  
4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left'],
```

```

'JustShot': False}

right
(True, [1, 1], 'right')

Move 42
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],
'Path': ['climb', 'forward', 'left', 'left', 'forward'], 'JustShot': False}

forward
(True, [2, 1], [None, 'breeze', None, None, 'scream'])

Move 43
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3],
'Path': ['climb', 'forward', 'left', 'left'], 'JustShot': False}

right
(True, [2, 1], 'down')

Move 44
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)],
'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0,

```

```
3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3], 'Path': ['climb', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [2, 1], 'left')
```

Move 45

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3], 'Path': ['climb', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 1], [None, None, None, None, 'scream'])
```

Move 46

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19CF40>, 'Pit?': [(3, 3), (2, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 3), (0, 2), (1, 0), (1, 3)], 'NotWampa': [(0, 1), (1, 2), (0, 4), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3), (0, 2), (3, 3), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 3), (2, 3), (1, 3), (1, 2), (1, 1)], 'GridSize': [inf, 3], 'Path': ['climb'], 'JustShot': False}
```

climb

```
(True, [1, 1], 'Congrats! R2 has saved Luke! +1000 points! Your final score: 953')
```

Move 0

```

{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [], 'Wampa?': [], 'NotPit':
[(1, 0), (0, 1), (0, 0)], 'NotWampa': [(1, 0), (0, 1), (0, 0)],
'Visited': [], 'GridSize': [inf, inf], 'Path': ['climb'], 'JustShot':
False}
forward
(True, [2, 1], [None, None, None, None, None])
Move 1
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [], 'Wampa?': [], 'NotPit':
[(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'NotWampa': [(0, 1), (0, 0),
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf],
'Path': ['climb', 'forward'], 'JustShot': False}
forward
(True, [3, 1], [None, 'breeze', None, None, None])
Move 2
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(2, 1), (3, 0)], 'Wampa?':
[], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'NotWampa':
[(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (1, 0)], 'Visited':
[(1, 0), (2, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward'], 'JustShot': False}
Backtracking
left
(True, [3, 1], 'up')
Move 3
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(2, 1), (3, 0)], 'Wampa?':
[], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'NotWampa':

```



```
[(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (1, 0)], 'Visited':  
[(1, 0), (2, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left'], 'JustShot': False}
```

Backtracking

left

```
(True, [3, 1], 'left')
```

Move 4

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(2, 1), (3, 0)], 'Wampa?':  
[], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'NotWampa':  
[(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (1, 0)], 'Visited':  
[(1, 0), (2, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left'], 'JustShot': False}
```

Backtracking

forward

```
(True, [2, 1], [None, None, None, None, None])
```

Move 5

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(2, 1), (3, 0)], 'Wampa?':  
[], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'NotWampa':  
[(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (1, 0)], 'Visited':  
[(1, 0), (2, 0), (1, 0)], 'GridSize': [inf, inf], 'Path': ['climb',  
'forward', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 1], [None, None, None, None, None])
```

Move 6

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(2, 1), (3, 0)], 'Wampa?':  
[], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'NotWampa':  
[(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (1, 0)], 'Visited':
```

```
[(1, 0), (2, 0), (1, 0), (0, 0)], 'GridSize': [inf, inf], 'Path':  
['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward'],  
'JustShot': False}
```

left

```
(True, [1, 1], 'down')
```

Move 7

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(2, 1), (3, 0)], 'Wampa?':  
[], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'NotWampa':  
[(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (1, 0)], 'Visited':  
[(1, 0), (2, 0), (1, 0), (0, 0)], 'GridSize': [inf, inf], 'Path':  
['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward',  
'left'], 'JustShot': False}
```

left

```
(True, [1, 1], 'right')
```

Move 8

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(2, 1), (3, 0)], 'Wampa?':  
[], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'NotWampa':  
[(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (1, 0)], 'Visited':  
[(1, 0), (2, 0), (1, 0), (0, 0)], 'GridSize': [inf, inf], 'Path':  
['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward',  
'left', 'left'], 'JustShot': False}
```

left

```
(True, [1, 1], 'up')
```

Move 9

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(2, 1), (3, 0)], 'Wampa?':  
[], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'NotWampa':  
[(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (1, 0)], 'Visited':
```

```

[(1, 0), (2, 0), (1, 0), (0, 0)], 'GridSize': [inf, inf], 'Path':
['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward',
'left', 'left', 'left'], 'JustShot': False}
forward
(True, [1, 2], [None, None, None, None, None])
Move 10
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(2, 1), (3, 0)], 'Wampa?':
[], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2), (1, 0)],
'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0, 2),
(1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1)],
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left',
'left', 'forward', 'forward', 'left', 'left', 'left', 'forward'],
'JustShot': False}
forward
(True, [1, 3], [None, 'breeze', None, None, None])
Move 11
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(0, 3), (1, 2), (2, 1), (3,
0)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2),
(1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1), (0, 3),
(2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0),
(0, 0), (0, 1), (0, 2)], 'GridSize': [inf, inf], 'Path': ['climb',
'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left',
'left', 'left', 'forward', 'forward'], 'JustShot': False}
Backtracking
left
(True, [1, 3], 'left')
Move 12
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.

```



```
'left', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'forward'], 'JustShot': False}
```

left

```
(True, [1, 2], 'right')
```

Move 15

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (0, 3), (2, 1), (3,  
0)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2),  
(1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1), (0, 3),  
(2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0),  
(0, 0), (0, 1), (0, 2), (0, 1)], 'GridSize': [inf, inf], 'Path':  
['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward',  
'left', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'forward', 'left'], 'JustShot': False}
```

forward

```
(True, [2, 2], [None, 'breeze', None, None, None])
```

Move 16

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (2, 1), (3, 0), (0,  
3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2),  
(1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1), (0, 3),  
(2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0),  
(0, 0), (0, 1), (0, 2), (0, 1), (1, 1)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'left', 'forward', 'forward', 'left',  
'left', 'forward', 'left', 'forward'], 'JustShot': False}
```

Backtracking

left

```
(True, [2, 2], 'up')
```

Move 17

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
```

```
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(0, 3), (1, 2), (2, 1), (3,  
0)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2),  
(1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1), (0, 3),  
(2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0),  
(0, 0), (0, 1), (0, 2), (0, 1), (1, 1)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'left', 'forward', 'forward', 'left',  
'left', 'forward', 'left', 'forward', 'left'], 'JustShot': False}
```

Backtracking

left

(True, [2, 2], 'left')

Move 18

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (0, 3), (2, 1), (3,  
0)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2),  
(1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1), (0, 3),  
(2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0),  
(0, 0), (0, 1), (0, 2), (0, 1), (1, 1)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'left', 'forward', 'forward', 'left',  
'left', 'forward', 'left', 'forward', 'left', 'left'], 'JustShot':
```

False}

Backtracking

forward

(True, [1, 2], [None, None, None, None, None])

Move 19

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (2, 1), (3, 0), (0,  
3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2),  
(1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1), (0, 3),
```

```
(2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0),
(0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1)], 'GridSize': [inf,
inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left',
'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward',
'left', 'left', 'forward', 'left', 'forward', 'left', 'left',
'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

left

```
(True, [1, 2], 'down')
```

Move 20

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(0, 3), (1, 2), (2, 1), (3,
0)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2),
(1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1), (0, 3),
(2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0),
(0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1)], 'GridSize': [inf,
inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left',
'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward',
'left', 'left', 'forward', 'left', 'forward', 'left', 'left',
'forward', 'left'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [1, 1], [None, None, None, None, None])
```

Move 21

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (0, 3), (2, 1), (3,
0)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2),
(1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1), (0, 3),
(2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0),
(0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0)], 'GridSize':
[inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left',
```

```
'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward',  
'left', 'left', 'forward', 'left', 'forward', 'left', 'left',  
'forward', 'left', 'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

left

```
(True, [1, 1], 'right')
```

Move 22

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (2, 1), (3, 0), (0,  
3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2),  
(1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1), (0, 3),  
(2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0),  
(0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0)], 'GridSize':  
[inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward',  
'left', 'left', 'forward', 'left', 'forward', 'left', 'left',  
'forward', 'left', 'forward', 'left'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [2, 1], [None, None, None, None, None])
```

Move 23

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(0, 3), (1, 2), (2, 1), (3,  
0)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2),  
(1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1), (0, 3),  
(2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0),  
(0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0)],  
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'left', 'forward', 'left', 'forward', 'left', 'forward'], 'JustShot':
```



```
False}
```

```
JESUS TAKE THE WHEEL
```

```
forward
```

```
(True, [3, 1], [None, 'breeze', None, None, None])
```

```
Move 24
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (0, 3), (2, 1), (3,  
0)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (0, 2),  
(1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1), (0, 3),  
(2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0),  
(0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,  
0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward',  
'left', 'left', 'forward', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'left', 'left', 'forward', 'left', 'forward', 'left', 'forward',  
'forward'], 'JustShot': False}
```

```
JESUS TAKE THE WHEEL
```

```
forward
```

```
(True, [4, 1], [None, 'breeze', None, None, None])
```

```
Move 25
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 0), (1, 2), (2, 1), (3,  
1), (0, 3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0),  
(3, 0), (0, 2), (1, 0)], 'NotWampa': [(0, 1), (1, 2), (4, 0), (2, 1),  
(0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0)],  
'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1,  
1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'left', 'forward', 'forward', 'left',  
'left', 'forward', 'left', 'forward', 'left', 'left', 'forward',  
'left', 'forward', 'left', 'forward', 'forward', 'forward'],
```

```
'JustShot': False}
```

Backtracking

left

```
(True, [4, 1], 'up')
```

Move 26

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (4, 0), (2, 1), (3, 1), (0, 3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0, 2), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (1, 2), (2, 1), (0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left'], 'JustShot': False}
```

Backtracking

left

```
(True, [4, 1], 'left')
```

Move 27

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 0), (1, 2), (2, 1), (3, 1), (0, 3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0, 2), (1, 0)], 'NotWampa': [(0, 1), (1, 2), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left'], 'JustShot': False}
```



```
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [1, 1], [None, None, None, None, None])
```

Move 30

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (4, 0), (2, 1), (3,  
1), (0, 3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0),  
(3, 0), (0, 2), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (1, 2), (2, 1),  
(0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0)],  
'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1,  
1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0)],  
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'forward'],  
'JustShot': False}
```

JESUS TAKE THE WHEEL

left

```
(True, [1, 1], 'down')
```

Move 31

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 0), (1, 2), (2, 1), (3,  
1), (0, 3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0),  
(3, 0), (0, 2), (1, 0)], 'NotWampa': [(0, 1), (1, 2), (4, 0), (2, 1),  
(0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0)],  
'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1,  
1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0)],
```

```
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left'],  
'JustShot': False}
```

JESUS TAKE THE WHEEL

left

(True, [1, 1], 'right')

Move 32

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (4, 0), (2, 1), (3,  
1), (0, 3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0),  
(3, 0), (0, 2), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (1, 2), (2, 1),  
(0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0)],  
'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1,  
1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0)],  
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',  
'left'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

(True, [2, 1], [None, None, None, None, None])

Move 33

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 0), (1, 2), (2, 1), (3,  
1), (0, 3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0),  
(3, 0), (0, 2), (1, 0)], 'NotWampa': [(0, 1), (1, 2), (4, 0), (2, 1),
```

```
(0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0)],  
'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1,  
1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1,  
0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward',  
'left', 'left', 'forward', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'left', 'left', 'forward', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'left', 'left', 'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [3, 1], [None, 'breeze', None, None, None])
```

Move 34

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (4, 0), (2, 1), (3,  
1), (0, 3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0),  
(3, 0), (0, 2), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (1, 2), (2, 1),  
(0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0)],  
'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1,  
1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1,  
0), (2, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [4, 1], [None, 'breeze', None, None, None])
```

Move 35

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
```

```
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 0), (1, 2), (2, 1), (3, 1), (0, 3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0, 2), (1, 0)], 'NotWampa': [(0, 1), (1, 2), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward'], 'JustShot': False}
```

left

(True, [4, 1], 'up')

Move 36

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (4, 0), (2, 1), (3, 1), (0, 3)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0, 2), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (1, 2), (2, 1), (0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left'], 'JustShot': False}
```

forward

(True, [4, 2], [None, 'breeze', None, None, None])

Move 37

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 0), (1, 2), (2, 1), (0, 3), (3, 2), (4, 1)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (0, 2), (1, 0)], 'NotWampa': [(0, 1), (1, 2), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0), (3, 2), (4, 1)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left', 'forward'], 'JustShot': False}
forward
(True, [4, 3], ['stench', None, None, None, None])
```

Move 38

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (4, 0), (2, 1), (0, 3), (4, 1)], 'Wampa?': [(3, 3), (4, 2), (2, 2)], 'NotPit': [(0, 1), (0, 0), (3, 1), (1, 1), (2, 0), (4, 2), (3, 0), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2)], 'NotWampa': [(0, 1), (4, 0), (1, 2), (2, 1), (0, 0), (3, 1), (1, 1), (0, 3), (2, 0), (3, 0), (0, 2), (1, 0), (3, 2), (4, 1)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
```



```
'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'left', 'forward', 'forward'], 'JustShot': False}
```

shoot

```
(True, [4, 3], 'Blaster bolt was shot')
```

Move 39

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 0), (1, 2), (2, 1), (0,  
3), (4, 1)], 'Wampa?': [], 'NotPit': [(0, 1), (0, 0), (3, 1), (1, 1),  
(2, 0), (4, 2), (3, 0), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2)],  
'NotWampa': [(0, 1), (1, 2), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1),  
(0, 3), (2, 0), (4, 2), (3, 0), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2),  
(4, 1)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2),  
(0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0),  
(0, 0), (1, 0), (2, 0), (3, 0)], 'GridSize': [inf, inf], 'Path':  
['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward',  
'left', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'forward', 'left', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'forward', 'forward', 'forward', 'left', 'left',  
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',  
'forward', 'left', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 4], [None, None, None, None, 'scream'])
```

Move 40

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 2), (4, 0), (2, 1), (0,  
3), (4, 1)], 'Wampa?': [], 'NotPit': [(0, 1), (3, 4), (0, 0), (3, 1),  
(4, 3), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (0, 2), (3, 3), (2, 2),  
(1, 0), (3, 2)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2),  
(2, 2), (1, 0), (4, 2), (3, 0), (3, 3), (0, 1), (1, 2), (2, 1), (3, 2),  
(4, 1), (0, 0), (1, 1), (0, 3), (2, 0), (2, 3)], 'Visited': [(1, 0),  
(2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0),
```

```
(1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0),
(3, 3)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',
'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 5], [None, 'breeze', None, None, 'scream'])
```

Move 41

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x000000258DE19C540>, 'Pit?': [(4, 4), (2, 4), (4, 0), (1,
2), (2, 1), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1),
(3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3),
(0, 2), (3, 3), (2, 2), (1, 0), (3, 2)], 'NotWampa': [(4, 0), (3, 4),
(4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (4, 2), (3, 0), (3, 3), (0, 1),
(2, 4), (1, 2), (2, 1), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1),
(0, 3), (2, 0), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0),
(0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0),
(2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4)],
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left',
'left', 'forward', 'forward', 'left', 'left', 'left', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',
'left', 'forward', 'forward', 'forward', 'left', 'forward', 'forward',
'forward', 'forward'], 'JustShot': False}
```

Backtracking

left

```
(True, [4, 5], 'left')
```

Move 42

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (2, 4), (1, 2), (4,  
0), (2, 1), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1),  
(3, 4), (0, 0), (3, 1), (4, 3), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3),  
(0, 2), (3, 3), (2, 2), (1, 0), (3, 2)], 'NotWampa': [(4, 0), (3, 4),  
(4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (4, 2), (3, 0), (3, 3), (0, 1),  
(2, 4), (1, 2), (2, 1), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1),  
(0, 3), (2, 0), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0),  
(0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0),  
(2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4)],  
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',  
'left', 'forward', 'forward', 'forward', 'left', 'forward', 'forward',  
'forward', 'forward', 'left'], 'JustShot': False}
```

forward

```
(True, [3, 5], [None, None, None, None, 'scream'])
```

Move 43

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (2,  
1), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4),  
(3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3),  
(1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa':  
[(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (4,  
2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (2, 1), (3, 2), (4, 1), (3,  
5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited':  
[(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0,  
1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2,  
0), (3, 0), (3, 3), (3, 4)], 'GridSize': [inf, inf], 'Path': ['climb',
```

```
'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left',  
'left', 'left', 'forward', 'forward', 'left', 'left', 'forward',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward',  
'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'left', 'forward', 'forward', 'forward', 'forward', 'left', 'forward'],  
'JustShot': False}
```

forward

```
(True, [2, 5], [None, 'breeze', 'gasp', None, 'scream'])
```

Move 44

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4,  
0), (2, 1), (0, 4), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,  
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,  
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,  
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,  
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',  
'forward', 'forward', 'forward', 'forward', 'left', 'forward',  
'forward'], 'JustShot': False}
```

grab

```
(True, [2, 5], 'R2-D2 has picked up Luke')
```

Move 45

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (2, 1), (0, 4), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'forward', 'forward', 'left', 'left'], 'JustShot': False}
right
(True, [2, 5], 'up')
```

Move 46

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,
```

```
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',
'forward', 'forward', 'forward', 'forward', 'left', 'forward',
'forward', 'left'], 'JustShot': False}
```

right

```
(True, [2, 5], 'right')
```

Move 47

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0,
4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [],
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',
'forward', 'forward', 'forward', 'forward', 'left', 'forward',
'forward'], 'JustShot': False}
```

forward

(True, [3, 5], [None, None, None, None, 'scream'])

Move 48

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'forward'], 'JustShot': False}
```

forward

(True, [4, 5], [None, 'breeze', None, None, 'scream'])

Move 49

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0, 4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,
```

```
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',
'forward', 'forward', 'forward', 'forward', 'left'], 'JustShot': False}
```

right

(True, [4, 5], 'down')

Move 50

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4,
0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [],
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',
```



```
'forward', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 4], [None, None, None, None, 'scream'])
```

Move 51

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0,  
4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,  
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,  
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,  
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,  
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',  
'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 3], [None, None, None, None, 'scream'])
```

Move 52

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4,  
0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,
```

```
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',
'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 2], [None, 'breeze', None, None, 'scream'])
```

Move 53

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0,
4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [],
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left',
'forward', 'forward'], 'JustShot': False}
```

```
'forward'], 'JustShot': False}
```

```
forward
```

```
(True, [4, 1], [None, 'breeze', None, None, 'scream'])
```

```
Move 54
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4,  
0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,  
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,  
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,  
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,  
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left'],  
'JustShot': False}
```

```
right
```

```
(True, [4, 1], 'left')
```

```
Move 55
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0,  
4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,
```

```
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'forward'],
'JustShot': False}
```

forward

```
(True, [3, 1], [None, 'breeze', None, None, 'scream'])
```

Move 56

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4,
0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [],
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'forward'], 'JustShot': False}
```

forward

(True, [2, 1], [None, None, None, None, 'scream'])

Move 57

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0, 4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
```

forward

(True, [1, 1], [None, None, None, None, 'scream'])

Move 58

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
```



```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [2, 1], [None, None, None, None, 'scream'])
```

Move 61

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0, 4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
```

```
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward'],  
'JustShot': False}
```

forward

```
(True, [3, 1], [None, 'breeze', None, None, 'scream'])
```

Move 62

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4,  
0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,  
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,  
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,  
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,  
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'forward', 'left', 'left', 'forward'],  
'JustShot': False}
```

forward

```
(True, [4, 1], [None, 'breeze', None, None, 'scream'])
```

Move 63

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0,
```



```
4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,  
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,  
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,  
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,  
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'forward', 'left', 'left'], 'JustShot': False}
```

right

(True, [4, 1], 'down')

Move 64

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x000000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x000000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4,  
0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,  
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,  
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,  
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,  
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
```

```
'forward', 'forward', 'forward', 'left'], 'JustShot': False}
```

```
right
```

```
(True, [4, 1], 'left')
```

```
Move 65
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0,  
4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,  
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,  
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,  
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,  
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'forward'], 'JustShot': False}
```

```
forward
```

```
(True, [3, 1], [None, 'breeze', None, None, 'scream'])
```

```
Move 66
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4,  
0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
```

```
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [2, 1], [None, None, None, None, 'scream'])
```

Move 67

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0, 4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 1], [None, None, None, None, 'scream'])
```

Move 68

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
```

```
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left'], 'JustShot': False}
```

right

(True, [1, 1], 'up')

Move 69

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0, 4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left'],
```

```
'forward', 'left', 'left', 'forward', 'left', 'forward'], 'JustShot':
False}
forward
(True, [1, 2], [None, None, None, None, 'scream'])
Move 70
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4,
0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [],
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',
'forward', 'left', 'left', 'forward', 'left'], 'JustShot': False}
right
(True, [1, 2], 'right')
```

Move 71

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0,
4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [],
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
```

```
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [2, 2], [None, 'breeze', None, None, 'scream'])
```

Move 72

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward'], 'JustShot': False}
```

right

```
(True, [2, 2], 'down')
```

Move 73

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0, 4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [],
```

```
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [2, 2], 'left')
```

Move 74

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left'], 'JustShot': False}
```

forward

```
(True, [1, 2], [None, None, None, None, 'scream'])
```

Move 75

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0, 4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left'], 'JustShot': False}
```

right

(True, [1, 2], 'up')

Move 76

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
```



```
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward'], 'JustShot':  
False}  
forward  
(True, [1, 3], [None, 'breeze', None, None, 'scream'])  
Move 77  
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0,  
4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,  
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,  
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,  
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,  
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left'], 'JustShot': False}  
right  
(True, [1, 3], 'right')
```

```
Move 78  
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4,  
0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
```

```
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [1, 3], 'down')
```

Move 79

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0, 4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 2], [None, None, None, None, 'scream'])
```

Move 80

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,
```

```
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 1], [None, None, None, None, 'scream'])
```

Move 81

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0,
4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [],
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left',
'left'], 'JustShot': False}
```

right

```
(True, [1, 1], 'left')
```

Move 82

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4,
```

```
0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,  
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,  
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,  
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,  
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'left'],  
'JustShot': False}
```

right

```
(True, [1, 1], 'up')
```

Move 83

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0,  
4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [],  
'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2,  
0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3,  
2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2,  
2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1,  
2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1,  
1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1,  
0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2,  
0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3,  
4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'forward', 'left', 'left', 'forward', 'forward', 'left'], 'JustShot':  
False}
```

right

```
(True, [1, 1], 'right')
```

Move 84

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward', 'forward'], 'JustShot': False}
forward
(True, [2, 1], [None, None, None, None, 'scream'])
```

Move 85

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0, 4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
forward
(True, [3, 1], [None, 'breeze', None, None, 'scream'])
```

Move 86

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left', 'left'], 'JustShot': False}
```

right

(True, [3, 1], 'down')

Move 87

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0, 4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward', 'left'], 'JustShot': False}
```

right

(True, [3, 1], 'left')

Move 88

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'forward'], 'JustShot': False}
```

forward

(True, [2, 1], [None, None, None, None, 'scream'])

Move 89

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (4, 0), (1, 2), (0, 4), (2, 1), (1, 5), (4, 1), (0, 3), (1, 3), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward'], 'JustShot': False}
```

forward

(True, [1, 1], [None, None, None, None, 'scream'])

Move 90

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(4, 4), (1, 3), (1, 2), (4, 0), (0, 4), (2, 1), (1, 5), (0, 3), (4, 1), (3, 5)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 4), (3, 4), (4, 3), (3, 1), (0, 0), (1, 1), (2, 0), (4, 2), (3, 0), (2, 3), (1, 4), (0, 2), (3, 3), (2, 2), (1, 0), (3, 2), (2, 5)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (2, 0), (1, 0), (0, 0), (0, 1), (0, 2), (0, 1), (1, 1), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 0), (1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (3, 3), (3, 4), (1, 4)], 'GridSize': [inf, inf], 'Path': ['climb'], 'JustShot': False}
```

climb

(True, [1, 1], 'Congrats! R2 has saved Luke! +1000 points! Your final score: 909')

Move 0

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(1, 0), (0, 1)], 'Wampa?': [], 'NotPit': [(0, 0)], 'NotWampa': [(1, 0), (0, 1), (0, 0)], 'Visited': [], 'GridSize': [inf, inf], 'Path': ['climb'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

(True, [2, 1], [None, 'breeze', None, None, None])

Move 1

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
```



```
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (2, 0)],  
'Wampa?': [], 'NotPit': [(1, 0), (0, 0)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward'], 'JustShot': False}
```

left

```
(True, [2, 1], 'up')
```

Move 2

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (2, 0)],  
'Wampa?': [], 'NotPit': [(1, 0), (0, 0)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward', 'left'], 'JustShot': False}
```

left

```
(True, [2, 1], 'left')
```

Move 3

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (2, 0)],  
'Wampa?': [], 'NotPit': [(1, 0), (0, 0)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward', 'left', 'left'], 'JustShot': False}
```

forward

```
(True, [1, 1], [None, 'breeze', None, None, None])
```

Move 4

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (2, 0)],  
'Wampa?': [], 'NotPit': [(1, 0), (0, 0)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf,  
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward'],  
'JustShot': False}
```

Backtracking

left

(True, [1, 1], 'down')

Move 5

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (2, 0)],
'Wampa?': [], 'NotPit': [(1, 0), (0, 0)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left'],
'JustShot': False}
```

Backtracking

left

(True, [1, 1], 'right')

Move 6

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (2, 0)],
'Wampa?': [], 'NotPit': [(1, 0), (0, 0)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left'],
'JustShot': False}
```

Backtracking

forward

(True, [2, 1], [None, 'breeze', None, None, None])

Move 7

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (2, 0)],
'Wampa?': [], 'NotPit': [(1, 0), (0, 0)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0), (1, 0)],
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

(True, [3, 1], ['stench', None, None, None, None])

Move 8

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1)], 'Wampa?': [(2, 1), (3, 0)], 'NotPit': [(2, 1), (0, 0), (2, 0), (3, 0), (1, 0)], 'NotWampa': [(0, 1), (0, 0), (1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward'], 'JustShot': False}
```

shoot

(True, [3, 1], 'Blaster bolt was shot')

Move 9

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1)], 'Wampa?': [], 'NotPit': [(2, 1), (0, 0), (2, 0), (3, 0), (1, 0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (1, 0)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward'], 'JustShot': False}
```

forward

(True, [4, 1], [None, None, None, None, 'scream'])

Move 10

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0), (3, 1), (2, 0), (3, 0), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (1, 0)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward'], 'JustShot': False}
```

```
'JustShot': False}
```

```
forward
```

```
(True, [5, 1], [None, 'breeze', None, None, 'scream'])
```

```
Move 11
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 0), (4,  
1)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0), (3, 1), (2, 0),  
(3, 0), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1),  
(1, 1), (2, 0), (3, 0), (5, 0), (1, 0), (4, 1)], 'Visited': [(1, 0),  
(0, 0), (1, 0), (2, 0), (3, 0), (4, 0)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'forward', 'forward', 'forward', 'forward'], 'JustShot': False}
```

```
Backtracking
```

```
left
```

```
(True, [5, 1], 'up')
```

```
Move 12
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 0), (4,  
1)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0), (3, 1), (2, 0),  
(3, 0), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1),  
(1, 1), (2, 0), (3, 0), (5, 0), (1, 0), (4, 1)], 'Visited': [(1, 0),  
(0, 0), (1, 0), (2, 0), (3, 0), (4, 0)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'forward', 'forward', 'forward', 'forward', 'left'], 'JustShot': False}
```

```
Backtracking
```

```
left
```

```
(True, [5, 1], 'left')
```

```
Move 13
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 0), (4,
```

```
1]], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0), (3, 1), (2, 0),
(3, 0), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1),
(1, 1), (2, 0), (3, 0), (5, 0), (1, 0), (4, 1)], 'Visited': [(1, 0),
(0, 0), (1, 0), (2, 0), (3, 0), (4, 0)], 'GridSize': [inf, inf],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
'forward', 'forward', 'forward', 'forward', 'left', 'left'],
'JustShot': False}
```

Backtracking

forward

```
(True, [4, 1], [None, None, None, None, 'scream'])
```

Move 14

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 0), (4,
1)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0), (3, 1), (2, 0),
(3, 0), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1),
(1, 1), (2, 0), (3, 0), (5, 0), (1, 0), (4, 1)], 'Visited': [(1, 0),
(0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0)], 'GridSize': [inf,
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',
'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left',
'forward'], 'JustShot': False}
```

left

```
(True, [4, 1], 'down')
```

Move 15

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 0), (4,
1)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0), (3, 1), (2, 0),
(3, 0), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1),
(1, 1), (2, 0), (3, 0), (5, 0), (1, 0), (4, 1)], 'Visited': [(1, 0),
(0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0)], 'GridSize': [inf,
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',
'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left',
'forward'], 'JustShot': False}
```

```
'forward', 'left'], 'JustShot': False}
```

```
left
```

```
(True, [4, 1], 'right')
```

Move 16

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 0), (4,  
1)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0), (3, 1), (2, 0),  
(3, 0), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1),  
(1, 1), (2, 0), (3, 0), (5, 0), (1, 0), (4, 1)], 'Visited': [(1, 0),  
(0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0)], 'GridSize': [inf,  
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',  
'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left',  
'forward', 'left', 'left'], 'JustShot': False}
```

```
left
```

```
(True, [4, 1], 'up')
```

Move 17

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 0), (4,  
1)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0), (3, 1), (2, 0),  
(3, 0), (1, 0)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1),  
(1, 1), (2, 0), (3, 0), (5, 0), (1, 0), (4, 1)], 'Visited': [(1, 0),  
(0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0)], 'GridSize': [inf,  
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',  
'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left',  
'forward', 'left', 'left', 'left'], 'JustShot': False}
```

```
forward
```

```
(True, [4, 2], [None, None, None, None, 'scream'])
```

Move 18

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 0)],
```

```
'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (3, 0), (5, 0), (1, 0), (3, 2), (4, 1)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 3], [None, 'breeze', None, None, 'scream'])
```

Move 19

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (4, 2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (4, 2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward'], 'JustShot': False}
```

Backtracking

left

```
(True, [4, 3], 'left')
```

Move 20

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (4, 2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa': [(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (4, 2), (3, 0), (3, 3),
```

```
(5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited': [(1, 0), (0, 0),
(1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2)], 'GridSize':
[inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left',
'left', 'forward', 'left', 'left', 'left', 'forward', 'forward',
'left'], 'JustShot': False}
```

Backtracking

left

```
(True, [4, 3], 'down')
```

Move 21

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (4, 2), (3,
3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0),
(3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa': [(0, 1),
(4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (4, 2), (3, 0), (3, 3),
(5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited': [(1, 0), (0, 0),
(1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2)], 'GridSize':
[inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left',
'left', 'forward', 'left', 'left', 'left', 'forward', 'forward',
'left', 'left'], 'JustShot': False}
```

Backtracking

forward

```
(True, [4, 2], [None, None, None, None, 'scream'])
```

Move 22

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (4, 2), (3,
3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0),
(3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa': [(0, 1),
(4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (4, 2), (3, 0), (3, 3),
(5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited': [(1, 0), (0, 0),
```



```
(1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1)],
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward',
'left', 'left', 'forward', 'left', 'left', 'left', 'forward',
'forward', 'left', 'left', 'forward'], 'JustShot': False}
left
(True, [4, 2], 'right')
Move 23
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (4, 2), (3,
3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1), (0, 0),
(3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa': [(0, 1),
(4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (4, 2), (3, 0), (3, 3),
(5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited': [(1, 0), (0, 0),
(1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1)],
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward',
'left', 'left', 'forward', 'left', 'left', 'left', 'forward',
'forward', 'left', 'left', 'forward', 'left'], 'JustShot': False}
forward
(True, [5, 2], [None, 'breeze', None, None, 'scream'])
```

```
Move 24
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,
2), (3, 1), (4, 1)], 'GridSize': [inf, inf], 'Path': ['climb',
'forward', 'left', 'left', 'forward', 'left', 'left', 'forward',
```

```
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'left', 'left', 'forward', 'forward', 'left', 'left', 'forward',  
'left', 'forward'], 'JustShot': False}
```

Backtracking

left

(True, [5, 2], 'up')

Move 25

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1)], 'GridSize': [inf, inf], 'Path': ['climb',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'forward',  
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'left', 'left', 'forward', 'forward', 'left', 'left', 'forward',  
'left', 'forward', 'left'], 'JustShot': False}
```

Backtracking

left

(True, [5, 2], 'left')

Move 26

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1)], 'GridSize': [inf, inf], 'Path': ['climb',
```

```
'forward', 'left', 'left', 'forward', 'left', 'left', 'forward',  
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'left', 'left', 'forward', 'forward', 'left', 'left', 'forward',  
'left', 'forward', 'left', 'left'], 'JustShot': False}
```

Backtracking

forward

```
(True, [4, 2], [None, None, None, None, 'scream'])
```

Move 27

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1), (3, 1)], 'GridSize': [inf, inf], 'Path': ['climb',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'forward',  
'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'left', 'left', 'forward', 'forward', 'left', 'left', 'forward',  
'left', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [3, 2], [None, 'breeze', None, None, 'scream'])
```

Move 28

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1), (3, 1), (2, 1)], 'GridSize': [inf, inf], 'Path':
```

```
['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward',  
'left', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'forward', 'left', 'forward', 'left', 'left', 'forward', 'forward'],  
'JustShot': False}
```

Backtracking

left

(True, [3, 2], 'down')

Move 29

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1), (3, 1), (2, 1)], 'GridSize': [inf, inf], 'Path':  
['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward',  
'left', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'forward', 'left', 'forward', 'left', 'left', 'forward', 'forward',  
'left'], 'JustShot': False}
```

Backtracking

forward

(True, [3, 1], [None, None, None, None, 'scream'])

Move 30

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,
```

```
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward',  
'left', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'forward', 'left', 'forward', 'left', 'left', 'forward', 'forward',  
'left', 'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

left

(True, [3, 1], 'right')

Move 31

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward',  
'left', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'forward', 'left', 'forward', 'left', 'left', 'forward', 'forward',  
'left', 'forward', 'left'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

(True, [4, 1], [None, None, None, None, 'scream'])

Move 32

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,
```

```
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,
2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0)], 'GridSize': [inf,
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',
'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left',
'forward', 'left', 'left', 'left', 'forward', 'forward', 'left',
'left', 'forward', 'left', 'forward', 'left', 'left', 'forward',
'forward', 'left', 'forward', 'left', 'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [5, 1], [None, 'breeze', None, None, 'scream'])
```

Move 33

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,
2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0)],
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left',
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward',
'left', 'left', 'forward', 'left', 'left', 'left', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',
'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward',
'forward'], 'JustShot': False}
```

left

```
(True, [5, 1], 'up')
```

Move 34

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0)],  
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left',  
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward',  
'left', 'left', 'forward', 'left', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward',  
'forward', 'left'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [5, 2], [None, 'breeze', None, None, 'scream'])
```

Move 35

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1)],  
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left',  
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward',  
'left', 'left', 'forward', 'left', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward',
```

```
'forward', 'left', 'forward'], 'JustShot': False}
```

```
left
```

```
(True, [5, 2], 'left')
```

```
Move 36
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1)],  
'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left',  
'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward',  
'left', 'left', 'forward', 'left', 'left', 'left', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'left',  
'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward',  
'forward', 'left', 'forward', 'left'], 'JustShot': False}
```

```
JESUS TAKE THE WHEEL
```

```
forward
```

```
(True, [4, 2], [None, None, None, None, 'scream'])
```

```
Move 37
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3,  
1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
```



```
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'left', 'forward', 'left', 'forward'],  
'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [3, 2], [None, 'breeze', None, None, 'scream'])
```

Move 38

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),  
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3,  
1), (2, 1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'left', 'left', 'forward', 'left', 'left', 'forward', 'forward',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'forward',  
'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward',  
'forward'], 'JustShot': False}
```

right

```
(True, [3, 2], 'up')
```

Move 39

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (5, 1), (4,  
2), (3, 3), (5, 0), (2, 2)], 'Wampa?': [], 'NotPit': [(4, 0), (2, 1),
```

```
(0, 0), (3, 1), (2, 0), (3, 0), (1, 0), (3, 2), (4, 1)], 'NotWampa':  
[(0, 1), (4, 0), (2, 1), (0, 0), (3, 1), (1, 1), (2, 0), (5, 1), (4,  
2), (3, 0), (3, 3), (5, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'Visited':  
[(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3,  
2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3,  
1), (2, 1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'left', 'left', 'forward', 'left', 'left', 'forward', 'forward',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'forward',  
'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward',  
'forward', 'right'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [3, 3], [None, 'breeze', None, None, 'scream'])
```

Move 40

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 2), (1, 1), (5,  
1), (4, 2), (2, 3), (3, 3), (5, 0)], 'Wampa?': [], 'NotPit': [(4, 0),  
(2, 1), (0, 0), (3, 1), (2, 0), (3, 0), (2, 2), (1, 0), (3, 2), (4,  
1)], 'NotWampa': [(0, 1), (4, 0), (1, 2), (2, 1), (0, 0), (3, 1), (1,  
1), (2, 0), (5, 1), (4, 2), (3, 0), (2, 3), (3, 3), (5, 0), (2, 2), (1,  
0), (3, 2), (4, 1)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3,  
0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2,  
0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf,  
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',  
'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left',  
'forward', 'left', 'left', 'left', 'forward', 'forward', 'left',  
'left', 'forward', 'left', 'forward', 'left', 'left', 'forward',  
'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left',  
'forward', 'left', 'forward', 'forward', 'right', 'forward'],  
'JustShot': False}
```



```
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (1, 4), (2, 3), (0, 2), (3, 3), (5, 0)], 'Wampa?': [],  
'NotPit': [(1, 3), (4, 0), (1, 2), (2, 1), (0, 0), (3, 1), (2, 0), (3,  
0), (2, 2), (1, 0), (3, 2), (4, 1)], 'NotWampa': [(4, 0), (3, 1), (5,  
1), (0, 2), (2, 2), (1, 0), (1, 3), (4, 2), (3, 0), (3, 3), (5, 0), (0,  
1), (1, 2), (2, 1), (3, 2), (4, 1), (0, 0), (1, 1), (0, 3), (2, 0), (1,  
4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4,  
0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3,  
0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward',  
'left', 'left', 'left', 'forward', 'forward', 'left', 'left',  
'forward', 'left', 'forward', 'left', 'left', 'forward', 'forward',  
'left', 'forward', 'left', 'forward', 'forward', 'left', 'forward',  
'left', 'forward', 'forward', 'right', 'forward', 'left', 'forward',  
'right', 'forward'], 'JustShot': False}
```

forward

```
(True, [2, 5], [None, None, None, None, 'scream'])
```

Move 45

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0)], 'Wampa?': [], 'NotPit':  
[(2, 4), (1, 2), (4, 0), (2, 1), (0, 4), (0, 0), (3, 1), (4, 1), (1,  
5), (2, 0), (1, 4), (3, 0), (2, 2), (1, 0), (3, 2), (1, 3)],  
'NotWampa': [(4, 0), (3, 1), (5, 1), (0, 2), (2, 2), (1, 0), (1, 3),  
(4, 2), (3, 0), (3, 3), (5, 0), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1),  
(1, 5), (3, 2), (4, 1), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2,  
3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3,  
0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4,  
0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path':  
['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
```



```
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (3, 4), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (2, 5)], 'Wampa?': [], 'NotPit': [(2, 4), (1, 2), (4, 0), (0, 4), (2, 1), (0, 0), (3, 1), (1, 5), (4, 1), (2, 0), (1, 4), (3, 0), (2, 2), (1, 0), (3, 2), (1, 3)], 'NotWampa': [(4, 0), (3, 4), (3, 1), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (5, 0), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward', 'right', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 5], [None, 'breeze', None, None, 'scream'])
```

Move 48

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (4, 4), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(1, 3), (2, 4), (4, 0), (1, 2), (0, 4), (2, 1), (0, 0), (3, 1), (1, 5), (3, 4), (2, 0), (1, 4), (3, 0), (2, 2), (1, 0), (3, 2), (4, 1)], 'NotWampa': [(4, 0), (3, 4), (3, 1), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (3, 3), (5, 0), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2,
```

```
1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'left', 'left', 'forward', 'left', 'left', 'forward', 'forward',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'forward', 'left', 'left', 'forward', 'left',  
'forward', 'left', 'left', 'forward', 'forward', 'left', 'forward',  
'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward',  
'forward', 'right', 'forward', 'left', 'forward', 'right', 'forward',  
'forward', 'right', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [5, 5], [None, None, None, None, 'scream'])
```

Move 49

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (2, 5), (3, 5)], 'Wampa?':  
[], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0),  
(1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2),  
(4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4),  
(4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3),  
(4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (0, 1), (2, 4), (1, 2), (0, 4),  
(2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3),  
(2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0),  
(3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1),  
(2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize':  
[inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward',  
'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'left', 'forward', 'forward',  
'left', 'left', 'forward', 'left', 'forward', 'left', 'left',  
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'left', 'forward', 'left', 'forward', 'forward', 'right', 'forward',  
'left', 'forward', 'right', 'forward', 'forward', 'right', 'forward',  
'forward', 'forward'], 'JustShot': False}
```

right

(True, [5, 5], 'down')

Move 50

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward', 'right', 'forward', 'forward', 'forward', 'right'], 'JustShot': False}
```

forward

(True, [5, 4], [None, 'breeze', 'gasp', None, 'scream'])

Move 51

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
```

```
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',
'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward',
'right', 'forward', 'forward', 'forward', 'right', 'forward'],
'JustShot': False}
```

grab

```
(True, [5, 4], 'R2-D2 has picked up Luke')
```

Move 52

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',
'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward',
'right', 'forward', 'forward', 'forward', 'right', 'forward']
```

```

'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',
'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward',
'right', 'forward', 'forward', 'forward', 'right', 'forward', 'left',
'left'], 'JustShot': False}
right
(True, [5, 4], 'left')
Move 53
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',
'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward',
'right', 'forward', 'forward', 'forward', 'right', 'forward', 'left'],
'JustShot': False}
right

```

(True, [5, 4], 'up')

Move 54

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'forward', 'forward', 'right', 'forward', 'forward', 'right', 'forward', 'forward', 'right', 'forward', 'forward', 'forward', 'right', 'forward'], 'JustShot': False}
```

forward

(True, [5, 5], [None, None, None, None, 'scream'])

Move 55

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
```

```
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',
'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward',
'right', 'forward', 'forward', 'forward', 'right'], 'JustShot': False}
```

left

(True, [5, 5], 'left')

Move 56

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',
'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward',
'right', 'forward', 'forward', 'forward', 'right'], 'JustShot': False}
```

```
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward',  
'right', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 5], [None, 'breeze', None, None, 'scream'])
```

Move 57

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
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5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,  
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,  
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,  
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1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,  
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward',  
'right', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [3, 5], [None, 'breeze', None, None, 'scream'])
```

Move 58

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'forward', 'forward', 'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward', 'right', 'forward'], 'JustShot': False}
```

forward

```
(True, [2, 5], [None, None, None, None, 'scream'])
```

Move 59

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
```

```
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',
'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward',
'right'], 'JustShot': False}
```

left

(True, [2, 5], 'down')

Move 60

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',
'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward',
'right'], 'JustShot': False}
```



```
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'right', 'forward', 'left', 'forward', 'right', 'forward', 'forward'],  
'JustShot': False}
```

forward

```
(True, [2, 4], [None, 'breeze', None, None, 'scream'])
```

Move 61

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,  
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,  
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,  
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,  
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,  
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,  
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'right', 'forward', 'left', 'forward', 'right', 'forward'], 'JustShot':  
False}
```

forward

```
(True, [2, 3], [None, 'breeze', None, None, 'scream'])
```

Move 62

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
```

```
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,  
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,  
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,  
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,  
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,  
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,  
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'right', 'forward', 'left', 'forward', 'right'], 'JustShot': False}
```

left

(True, [2, 3], 'right')

Move 63

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,  
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,  
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,  
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,  
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,  
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
```

```
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'right', 'forward', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [3, 3], [None, 'breeze', None, None, 'scream'])
```

Move 64

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,  
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,  
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,  
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,  
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,  
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,  
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',  
'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward',  
'right', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [3, 3], 'down')
```

Move 65

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'forward', 'forward', 'left', 'forward', 'forward', 'right', 'forward'], 'JustShot': False}
```

forward

```
(True, [3, 2], [None, 'breeze', None, None, 'scream'])
```

Move 66

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
```

```
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'right'], 'JustShot': False}
```

left

```
(True, [3, 2], 'right')
```

Move 67

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward'], 'JustShot': False}
```

forward

(True, [4, 2], [None, None, None, None, 'scream'])

Move 68

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward'], 'JustShot': False}
```

forward

(True, [5, 2], [None, 'breeze', None, None, 'scream'])

Move 69

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
```

```
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'left', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [5, 2], 'down')
```

Move 70

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward', 'left', 'forward', 'left'],
```

```
'forward', 'forward', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [5, 1], [None, 'breeze', None, None, 'scream'])
```

Move 71

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'forward', 'left', 'forward', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [5, 1], 'left')
```

Move 72

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
```



```
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 1], [None, None, None, None, 'scream'])
```

Move 73

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward', 'left',
'forward', 'forward'], 'JustShot': False}
```

```
'forward'], 'JustShot': False}
```

```
forward
```

```
(True, [3, 1], [None, None, None, None, 'scream'])
```

```
Move 74
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'left', 'forward', 'left'], 'JustShot': False}
```

```
right
```

```
(True, [3, 1], 'up')
```

```
Move 75
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
```

```
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left', 'forward'], 'JustShot':
False}
```

forward

```
(True, [3, 2], [None, 'breeze', None, None, 'scream'])
```

Move 76

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward', 'forward', 'left'], 'JustShot': False}
```

right

(True, [3, 2], 'right')

Move 77

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'forward'], 'JustShot': False}
```

forward

(True, [4, 2], [None, None, None, None, 'scream'])

Move 78

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
```

```
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [5, 2], [None, 'breeze', None, None, 'scream'])
```

Move 79

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'left', 'left'], 'JustShot': False}
```

right

```
(True, [5, 2], 'down')
```

Move 80

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'left'], 'JustShot': False}
```

right

(True, [5, 2], 'left')

Move 81

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
```

```
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left', 'forward'],
'JustShot': False}
```

forward

```
(True, [4, 2], [None, None, None, None, 'scream'])
```

Move 82

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward', 'left', 'left', 'forward', 'left'], 'JustShot':
False}
```

right

```
(True, [4, 2], 'up')
```

Move 83

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
```

```
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,  
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,  
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,  
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,  
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,  
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,  
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 3], [None, 'breeze', None, None, 'scream'])
```

Move 84

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,  
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,  
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,  
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,  
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,  
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,  
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left', 'left', 'forward']
```



```
'forward', 'forward', 'left', 'left'], 'JustShot': False}
```

```
right
```

```
(True, [4, 3], 'right')
```

```
Move 85
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,  
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,  
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,  
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,  
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,  
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,  
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'forward', 'left'], 'JustShot': False}
```

```
right
```

```
(True, [4, 3], 'down')
```

```
Move 86
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,  
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
```

```
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 2], [None, None, None, None, 'scream'])
```

Move 87

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x000000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
'forward'], 'JustShot': False}
```

forward

```
(True, [4, 1], [None, None, None, None, 'scream'])
```

Move 88

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x000000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
```

```
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'left'], 'JustShot': False}
```

right

(True, [4, 1], 'left')

Move 89

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'left'], 'JustShot': False}
```

```
'forward', 'left', 'left', 'forward', 'left', 'left'], 'JustShot':
```

```
False}
```

```
right
```

```
(True, [4, 1], 'up')
```

```
Move 90
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
```

```
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
```

```
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
```

```
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
```

```
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
```

```
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
```

```
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
```

```
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
```

```
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
```

```
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
```

```
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
```

```
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
```

```
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
```

```
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
```

```
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
```

```
'forward', 'left', 'left', 'forward', 'left'], 'JustShot': False}
```

```
right
```

```
(True, [4, 1], 'right')
```

```
Move 91
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
```

```
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
```

```
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
```

```
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
```

```
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
```

```
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
```

```
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
```

```
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
```

```
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
```

```
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [5, 1], [None, 'breeze', None, None, 'scream'])
```

Move 92

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward',
'forward', 'left', 'left'], 'JustShot': False}
```

right

```
(True, [5, 1], 'down')
```

Move 93

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
```

```
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [5, 1], 'left')
```

Move 94

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [4, 1], [None, None, None, None, 'scream'])
```

Move 95

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2, 2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [3, 1], [None, None, None, None, 'scream'])
```

Move 96

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5, 1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)], 'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2, 2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2, 5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2, 4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0, 0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0, 0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4, 1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
```

```
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward', 'forward'], 'JustShot':
False}
forward
(True, [2, 1], [None, 'breeze', None, None, 'scream'])
Move 97
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
forward
(True, [1, 1], [None, 'breeze', None, None, 'scream'])
```

Move 98

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
```



```
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left', 'left'], 'JustShot': False}
```

right

```
(True, [1, 1], 'up')
```

Move 99

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [1, 1], 'right')
```

Move 100

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
```

```
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [2, 1], [None, 'breeze', None, None, 'scream'])
```

Move 101

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',
'left'], 'JustShot': False}
```

right

```
(True, [2, 1], 'down')
```

Move 102

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,
```

```
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,  
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,  
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,  
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,  
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,  
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,  
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left'],  
'JustShot': False}
```

right

```
(True, [2, 1], 'left')
```

Move 103

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,  
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,  
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,  
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,  
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,  
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,  
2)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward'], 'JustShot':  
False}
```

forward

```
(True, [1, 1], [None, 'breeze', None, None, 'scream'])
```

Move 104

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A8E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE14B060>, 'Pit?': [(0, 1), (1, 1), (0, 3), (5,  
1), (4, 2), (2, 3), (0, 2), (3, 3), (5, 0), (5, 3), (2, 5), (3, 5)],  
'Wampa?': [], 'NotPit': [(4, 0), (3, 4), (4, 3), (3, 1), (5, 4), (2,  
2), (1, 0), (1, 3), (3, 0), (4, 5), (2, 4), (1, 2), (0, 4), (2, 1), (1,  
5), (3, 2), (4, 1), (4, 4), (0, 0), (2, 0), (1, 4)], 'NotWampa': [(4,  
0), (3, 4), (4, 3), (3, 1), (5, 4), (5, 1), (0, 2), (2, 2), (1, 0), (2,  
5), (1, 3), (4, 2), (3, 0), (4, 5), (3, 3), (5, 0), (5, 3), (0, 1), (2,  
4), (1, 2), (0, 4), (2, 1), (1, 5), (3, 2), (4, 1), (3, 5), (4, 4), (0,  
0), (1, 1), (0, 3), (2, 0), (1, 4), (2, 3)], 'Visited': [(1, 0), (0,  
0), (1, 0), (2, 0), (3, 0), (4, 0), (3, 0), (3, 1), (3, 2), (3, 1), (4,  
1), (3, 1), (2, 1), (2, 0), (3, 0), (4, 0), (4, 1), (3, 1), (2, 1), (2,  
2)], 'GridSize': [inf, inf], 'Path': ['climb'], 'JustShot': False}  
climb
```

```
(True, [1, 1], 'Congrats! R2 has saved Luke! +1000 points! Your final  
score: 895')
```

Move 0

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [], 'Wampa?': [], 'NotPit':  
[(1, 0), (0, 1), (0, 0)], 'NotWampa': [(1, 0), (0, 1), (0, 0)],  
'Visited': [], 'GridSize': [inf, inf], 'Path': ['climb'], 'JustShot':  
False}
```

forward

```
(True, [2, 1], [None, 'breeze', None, None, None])
```

Move 1

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':  
[], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf],  
'Path': ['climb', 'forward'], 'JustShot': False}
```

left

(True, [2, 1], 'up')

Move 2

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':
[], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1), (0, 0),
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf],
'Path': ['climb', 'forward', 'left'], 'JustShot': False}
```

left

(True, [2, 1], 'left')

Move 3

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':
[], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0),
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0)], 'GridSize': [inf, inf],
'Path': ['climb', 'forward', 'left', 'left'], 'JustShot': False}
```

forward

(True, [1, 1], [None, None, None, None, None])

Move 4

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':
[], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1), (0, 0),
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf,
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward'],
'JustShot': False}
```

left

(True, [1, 1], 'down')

Move 5

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
```

```
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':  
[], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf,  
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left'],  
'JustShot': False}
```

left

```
(True, [1, 1], 'right')
```

Move 6

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':  
[], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf,  
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',  
'left'], 'JustShot': False}
```

left

```
(True, [1, 1], 'up')
```

Move 7

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0)], 'Wampa?':  
[], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1), (0, 0),  
(1, 1), (2, 0), (1, 0)], 'Visited': [(1, 0), (0, 0)], 'GridSize': [inf,  
inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',  
'left', 'left'], 'JustShot': False}
```

forward

```
(True, [1, 2], [None, 'breeze', None, None, None])
```

Move 8

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0), (0, 2)],  
'Wampa?': [], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1),  
(0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0),
```

```
(0, 1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'left', 'forward'], 'JustShot':  
False}
```

Backtracking

left

```
(True, [1, 2], 'left')
```

Move 9

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0), (0, 2)],  
'Wampa?': [], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1),  
(0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0),  
(0, 1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'left', 'forward', 'left'],  
'JustShot': False}
```

Backtracking

left

```
(True, [1, 2], 'down')
```

Move 10

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0), (0, 2)],  
'Wampa?': [], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1),  
(0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0),  
(0, 1)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left'],  
'JustShot': False}
```

Backtracking

forward

```
(True, [1, 1], [None, None, None, None, None])
```

Move 11

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
```

```
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0), (0, 2)],  
'Wampa?': [], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1),  
(0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0),  
(0, 1), (0, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left',  
'left', 'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

left

(True, [1, 1], 'right')

Move 12

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0), (0, 2)],  
'Wampa?': [], 'NotPit': [(1, 0), (0, 1), (0, 0)], 'NotWampa': [(0, 1),  
(0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0),  
(0, 1), (0, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward',  
'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left',  
'left', 'forward', 'left'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

(True, [2, 1], [None, 'breeze', None, None, None])

Move 13

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 0), (0, 2)],  
'Wampa?': [], 'NotPit': [(1, 0), (0, 0), (0, 1)], 'NotWampa': [(0, 1),  
(0, 0), (1, 1), (2, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0),  
(0, 1), (0, 0), (1, 0)], 'GridSize': [inf, inf], 'Path': ['climb',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward'], 'JustShot':  
False}
```

JESUS TAKE THE WHEEL

forward

(True, [3, 1], [None, None, None, None, None])

Move 14

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 1), (0, 0), (2, 0), (3, 0), (1, 0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0)], 'GridSize': [inf, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'forward', 'forward'], 'JustShot': False}
```

forward

(False, [3, 1], [None, None, None, 'bump', None])

Move 15

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 1), (0, 0), (2, 0), (3, 0), (1, 0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward'], 'JustShot': False}
```

left

(True, [3, 1], 'up')

Move 16

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 1), (0, 0), (2, 0), (3, 0), (1, 0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left',
```

```
'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left',  
'forward', 'left', 'forward', 'forward', 'forward', 'left'],  
'JustShot': False}
```

forward

```
(True, [3, 2], ['stench', 'breeze', None, None, None])
```

Move 17

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 2), (0, 2)],  
'Wampa?': [(2, 2)], 'NotPit': [(0, 1), (2, 1), (0, 0), (2, 0), (3, 0),  
(1, 0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0),  
(0, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0),  
(2, 0), (3, 0), (2, 1)], 'GridSize': [2, inf], 'Path': ['climb',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'left', 'forward'], 'JustShot': False}
```

shoot

```
(True, [3, 2], 'Blaster bolt was shot')
```

Move 18

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(0, 2), (1, 1), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (2, 1), (0, 0), (2, 0), (3, 0), (1,  
0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0,  
2), (2, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1,  
0), (2, 0), (3, 0), (2, 1)], 'GridSize': [2, inf], 'Path': ['climb',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'left', 'forward'], 'JustShot': False}
```

Backtracking

left

```
(True, [3, 2], 'left')
```

Move 19

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (0, 2), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (2, 1), (0, 0), (2, 0), (3, 0), (1,  
0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0,  
2), (2, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1,  
0), (2, 0), (3, 0), (2, 1)], 'GridSize': [2, inf], 'Path': ['climb',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'left', 'forward', 'left'], 'JustShot': False}
```

Backtracking

left

(True, [3, 2], 'down')

Move 20

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 2), (0, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (2, 1), (0, 0), (2, 0), (3, 0), (1,  
0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0,  
2), (2, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1,  
0), (2, 0), (3, 0), (2, 1)], 'GridSize': [2, inf], 'Path': ['climb',  
'forward', 'left', 'left', 'forward', 'left', 'left', 'left',  
'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'left', 'forward', 'left'], 'JustShot': False}
```

Backtracking

forward

(True, [3, 1], [None, None, None, None, 'scream'])

Move 21

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(0, 2), (1, 1), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (2, 1), (0, 0), (2, 0), (3, 0), (1,  
0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0,
```

```
2), (2, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

left

(True, [3, 1], 'right')

Move 22

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (0, 2), (2, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 1), (0, 0), (2, 0), (3, 0), (1, 0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0, 2), (2, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

left

(True, [3, 1], 'up')

Move 23

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (2, 2), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (2, 1), (0, 0), (2, 0), (3, 0), (1, 0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0, 2), (2, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left',
```

```
'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward',  
'forward', 'left', 'forward', 'left', 'left', 'forward', 'left',  
'left'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [3, 2], [None, 'breeze', None, None, 'scream'])
```

Move 24

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(0, 2), (1, 1), (2, 2)],  
'Wampa?': [], 'NotPit': [(0, 1), (2, 1), (0, 0), (2, 0), (3, 0), (1,  
0)], 'NotWampa': [(0, 1), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (0,  
2), (2, 2), (1, 0)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1,  
0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1)], 'GridSize': [2, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'left', 'forward', 'left', 'left', 'forward',  
'left', 'left', 'forward'], 'JustShot': False}
```

JESUS TAKE THE WHEEL

forward

```
(True, [3, 3], [None, None, None, None, 'scream'])
```

Move 25

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (0, 2)], 'Wampa?':  
[], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3),  
(2, 2), (1, 0)], 'NotWampa': [(0, 1), (1, 2), (2, 1), (0, 0), (1, 1),  
(2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0)], 'Visited': [(1, 0),  
(0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1),  
(2, 2)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left',  
'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left',  
'forward', 'left', 'forward', 'forward', 'forward', 'left', 'forward',  
'left', 'left', 'forward', 'left', 'left', 'forward', 'forward'],
```

```
'JustShot': False}
```

```
forward
```

```
(True, [3, 4], [None, 'breeze', 'gasp', None, 'scream'])
```

```
Move 26
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,  
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),  
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),  
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),  
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),  
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'left', 'forward', 'left', 'left', 'forward',  
'left', 'left', 'forward', 'forward', 'forward'], 'JustShot': False}
```

```
Backtracking
```

```
grab
```

```
(True, [3, 4], 'R2-D2 has picked up Luke')
```

```
Move 27
```

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,  
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),  
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),  
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),  
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),  
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'left', 'forward', 'left', 'left', 'forward',  
'left', 'left', 'forward', 'forward', 'forward', 'left', 'left'],  
'JustShot': False}
```

right

(True, [3, 4], 'right')

Move 28

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'left'], 'JustShot': False}
```

right

(True, [3, 4], 'down')

Move 29

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'left', 'forward', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

(True, [3, 3], [None, None, None, None, 'scream'])

Move 30

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward', 'forward'], 'JustShot': False}
forward
(True, [3, 2], [None, 'breeze', None, None, 'scream'])
```

Move 31

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
forward
(True, [3, 1], [None, None, None, None, 'scream'])
```

Move 32

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
```



```
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left', 'left'], 'JustShot': False}
```

right

```
(True, [3, 1], 'left')
```

Move 33

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward', 'left', 'forward', 'left', 'left', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [3, 1], 'up')
```

Move 34

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
```

```
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'forward', 'forward', 'left', 'forward', 'left', 'left', 'forward'],
'JustShot': False}
```

forward

```
(True, [3, 2], [None, 'breeze', None, None, 'scream'])
```

Move 35

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',
'forward', 'forward', 'left', 'forward', 'left', 'left'], 'JustShot':
False}
```

right

```
(True, [3, 2], 'right')
```

Move 36

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
```

```
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'left', 'forward', 'left'], 'JustShot': False}  
right  
(True, [3, 2], 'down')
```

Move 37

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,  
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),  
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),  
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),  
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),  
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'left', 'forward'], 'JustShot': False}  
forward  
(True, [3, 1], [None, None, None, None, 'scream'])
```

Move 38

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,  
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),  
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),  
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),  
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),  
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward',  
'forward', 'forward', 'left'], 'JustShot': False}  
right  
(True, [3, 1], 'left')
```

Move 39

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [2, 1], [None, 'breeze', None, None, 'scream'])
```

Move 40

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left', 'left', 'forward', 'left', 'left', 'forward', 'left', 'forward', 'forward', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 1], [None, None, None, None, 'scream'])
```

Move 41

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),
```

```
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
'left', 'forward', 'left', 'left', 'forward', 'left', 'forward'],
'JustShot': False}
```

forward

```
(False, [1, 1], [None, None, None, 'bump', 'scream'])
```

Move 42

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
'left', 'forward', 'left', 'left', 'forward', 'left'], 'JustShot':
False}
```

right

```
(True, [1, 1], 'up')
```

Move 43

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
```

```
'left', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 2], [None, 'breeze', None, None, 'scream'])
```

Move 44

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,  
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),  
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),  
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),  
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),  
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left', 'left'], 'JustShot': False}
```

right

```
(True, [1, 2], 'right')
```

Move 45

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,  
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),  
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),  
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),  
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),  
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],  
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',  
'left', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [1, 2], 'down')
```

Move 46

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at  
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,
```

```
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
'left', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 1], [None, None, None, None, 'scream'])
```

Move 47

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left', 'left',
'left'], 'JustShot': False}
```

right

```
(True, [1, 1], 'left')
```

Move 48

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left',
'left'], 'JustShot': False}
```

right

(True, [1, 1], 'up')

Move 49

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward', 'left'], 'JustShot': False}
```

right

(True, [1, 1], 'right')

Move 50

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0), (3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2), (2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0), (1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0), (3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf], 'Path': ['climb', 'forward', 'left', 'left', 'forward'], 'JustShot': False}
```

forward

(True, [2, 1], [None, 'breeze', None, None, 'scream'])

Move 51

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0, 2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),
```



```
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
'Path': ['climb', 'forward', 'left', 'left'], 'JustShot': False}
```

right

```
(True, [2, 1], 'down')
```

Move 52

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
'Path': ['climb', 'forward', 'left'], 'JustShot': False}
```

right

```
(True, [2, 1], 'left')
```

Move 53

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],
'Path': ['climb', 'forward'], 'JustShot': False}
```

forward

```
(True, [1, 1], [None, None, None, None, 'scream'])
```

Move 54

```
{'S<->W': <function Agent.__init__.<locals>.<lambda> at
```

```
0x00000258DE14A3E0>, 'B<->P': <function Agent.__init__.<locals>.  
<lambda> at 0x00000258DE19C540>, 'Pit?': [(1, 1), (1, 3), (2, 4), (0,  
2)], 'Wampa?': [], 'NotPit': [(0, 1), (1, 2), (2, 1), (0, 0), (2, 0),  
(3, 0), (2, 3), (2, 2), (1, 0)], 'NotWampa': [(0, 1), (2, 4), (1, 2),  
(2, 1), (0, 0), (1, 1), (2, 0), (3, 0), (2, 3), (0, 2), (2, 2), (1, 0),  
(1, 3)], 'Visited': [(1, 0), (0, 0), (0, 1), (0, 0), (1, 0), (2, 0),  
(3, 0), (2, 1), (2, 0), (2, 1), (2, 2), (2, 3)], 'GridSize': [2, inf],  
'Path': ['climb'], 'JustShot': False}  
climb  
(True, [1, 1], 'Congrats! R2 has saved Luke! +1000 points! Your final  
score: 945')
```

4

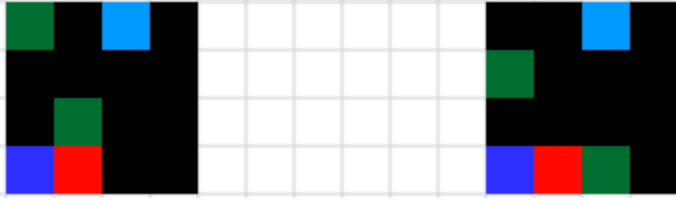
The order in which the agent traverses unvisited, known safe squares does not change the outcome, so the agent could use any method for determining which to visit first and still succeed.

5

Due to searching for guaranteed safe paths, and not having Luke's location for pathfinding, it is not guaranteed that the agent will take the shortest path. In addition, we use the simple method of retracing all previous movement actions to return to the beginning, so the return path will nearly always be longer than necessary.

6

There are many points where a safe next square cannot be determined. For example, in scenario 1 (Dark blue start, Red Wampa, Green pit, Light blue Luke):



The left is the scenario, while the right is a scenario that would produce the exact same percepts. All possible paths through the first must go through either (3,1) or (1,3), but both squares are pits in the right scenario. To complete the task, R2 must travel to either (3,1) or (1,3) without being sure they are not pits.

7

One example of a real life use of a logical agent would be in the domain of process automation. In a manufacturing factory many agents work simultaneously to transport materials and manufacture products. These agents can be controlled using logic.

8

The primary difference between logical agents and search agents is that logical agents make inferences using formalized logic rules while search agents use various data structures and heuristics to explore the search space.

9

In some sense, the agent does perform search when determining which action to take next. We chose not to implement any formal search algorithms in this project, but there is a potential to implement search when deciding how to return from the goal state to the start state.

10

About 15+ hours total work

11

Several of the scenarios require blind movements, creating an agent capable of solving each scenario required finding the right logic applicable to the specific scenarios given

12

While it was instructive in the limitations of propositional logic agents, the task given is not one that is guaranteed to be solvable. I don't think the assignment represents a situation where a propositional logic agent (at least with the given percepts) is appropriate, and doesn't represent using a propositional logic agent to solve a problem very well