

# Lab 3 Task 8 Solution

## 8) Additional Tasks

### 8.1) A user player

```
1  ...
2  class UserPlayer(Player):
3
4  def move(self, current: int, min_step: int,
5          max_step: int, goal: int) -> int:
6
7      amount = 0
8
9      while True:
10         amount_raw = input('Enter step amount ({}-{})'.format(min_step
11         , max_step))
12
13         if len(amount_raw.strip()) == 0:
14             print('Please select integer value between {} and {}'.
15             format(min_step, max_step))
16             continue
17
18         if re.search(r'^0-9+', amount_raw):
19             print('Please select integer value between {} and {}'.
20             format(min_step, max_step))
21             continue
22
23         amount = int(amount_raw)
24         if amount < min_step or amount > max_step:
25             print('Please select steps between {} and {}'.format(
26             min_step, max_step))
27             continue
28
29         break
30
31     return amount
32
33  ...
34  def make_player(generic_name: str) -> Player:
35      ...
36      return UserPlayer(name)
```

```
34     ...
35
36     if __name__ == '__main__':
37         # Uncomment the lines below to check your work using
38         # python_ta and doctest.
39         # import python_ta
40         # python_ta.check_all(config={
41         #     'extra-imports': ['random'],
42         #     'allowed-io': [
43         #         'main',
44         #         'make_player',
45         #         'move',
46         #         'play_one_turn'
47         #     ]
48         # })
49     main()
```

## 8.2) A strategic player

## 8.3) Tracking and reporting a player's record