CENG 113 Programming Basics
HOMEWORK #5
04.01.2020

You are asked to implement the BlockCraft game with the following scenario:

- The player is in the wild and he has 16 hours to build himself a shelter and go inside it before it is dark and predators start hunting.
- Shelter means an enclosed space surrounded by planks or bricks.
- He is at the top left corner of a 10x10 grid and he can see his surroundings.
- The player can **move**, **pick**, **make** or **put**:
    - Move either move up (w), down (s), left (a) or right (d) if the grid allows to do so.
    - Pick the contents of the current square (if the square is not empty) and add them to his inventory.
        - wood, dirt or water
    - Make new items using the available items in the inventory.
        - plank using 2 woods or brick using 2 dirt 1 water
    - Put the item to the current square if it is empty
- Each action takes 15 minutes.
- The game ends if the player enters 'o' or when the time is over and/or when the player is in a shelter. At the end of the game:
    - if player is not in a shelter, the game is lost.
    - if the player is in a shelter, the game is won and a total point is calculated.
        - each plank used for the shelter is 2 pts and each brick is 3 pts. Each square enclosed within the shelter is 3 pts.

You are given an incomplete Python script. First, <u>look carefully and try to understand its structure</u>. You have to fill in the missing parts by **removing the "pass" lines (13 in total) and inserting your code. Do not touch the rest of the code!** The comments in the script give the required information about the corresponding sections.

Have fun.

Submission Rules

- You have to <u>submit only one .py file</u> including your solution to CMS until due date.
- Your homework should be named as "**ceng113_hw5_studentID.py**".
- Write your <u>name and student ID as a comment</u> at the beginning of your code.
- Cheating, including teamwork, will not be tolerated.