Task 3

Introduce a new type of terrain Mountain and a new piece Mountain Digger Serf (MDS) to your game. For Player One, this new piece is displayed using 'M' and for Player 2 it is displayed using 'm'. The new terrain appears as '^' on the grid.

In the default game, make the mountain terrain appear on tile index 7 and 16.

Each player must be able to upgrade their Serf piece into Mountain Digger Serf using the upgrade command (For eg, upgrade mds 7, where 7 is the tile index)

| Piece | Movement | Other Commands | Victory Points |
|-----------------|-------------------------|--------------------------|-----------------------|
| Mountain Digger | Can move if it is | If given the dig | Worth two victory |
| Serf (MDS) | currently in a field, | command when in a | points for the |
| | forest or peatbog tile. | mountain tile, the | opponent if destroyed |
| | This movement | player's fuel supply | |
| | causes two fuel | increase by either one | |
| | | or three. | |
| | Cannot move if in a | | |
| | mountain tile | The amount added | |
| | | depends on the result | |
| | | of a random number | |
| | | generation | |
| | | | |
| | | If the fuel is increased | |
| | | by three, the terrain | |
| | | changes from | |
| | | mountain to peat bog. | |

Task 4

This question refers to the PlayGame subroutine in the main program.

The commands input by the player are already converted to lower case, which makes them case-insensitive. However, sometimes a player may additionally or accidentally type a space at the beginning or end of their command – currently this often causes an invalid command. Change the same line of code that converts them to lower case to also remove any leading or trailing spaces; feel free to use your own subroutine for this, or a built-in subroutine.

Test that the change you have made works:

- a) Choose menu option 1 to run the default game and then enter the following commands (they are in quotes as the spaces are important to type):
 - "move 8 16"
 - "move 8 16"
 - "upgrade pbds 16"
- b) Show a screen copy of entering the commands and the response from the computer up to the point at which it prints out the Player One current state line.

Task 5

This question refers to the SetUpDefaultGame subroutine in the main program.

At the moment, the game sets the default names of the players to 'Player One' and 'Player Two' in the SetUpDefaultGame subroutine. Change this subroutine to prompt for the two names of the players and then use the values entered to construct the players.

Test that the changes you have made work:

- a) Choose menu option 1 to run the default game and then enter "Tom" as the name for Player One and 'Vicky' as the name for Player Two.
- b) Show a screen copy of entering the commands and the responses from the computer up to and including the prompt for the first player to enter their commands.