

CS 246 Final Project Demo

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Need to show:

Initialization:

- empty board (with default.txt)

- spawned board (both default.txt and readin version)

explain: PC and enemy are in different chamber, show number of enemies, potions, and gold are correct.

- initialize with each player character to show the initial stats are correct

PC and Enemy: - attack each enemy and show that the stats are correct, also show the special abilities of different enemies or pc are in effect.

PC MOVE:

- movePC towards an occupied postion

- movePC through chambers and passages

- movePC to next level

- movePC to gold, move PC to dragonHoard

- movePC near each enemy to show each enemy will attack PC

- movePC near dragonHoard to show that Dragon will attack PC

- movePC near merchant that is not hostile yet

PC ATTACK:

- PC attack each race of enemy, and get attacked back, show stats calculation and show the special effect of each enemy and PC, this will cause

race number of PC * race number of Enemy combinations

- PC attack

Once upon the time, heros moved through the dungeon and slayed evil enemies while collecting treasures along the way. However, the monsters have revolted and demanded to be made the heroes! Yes, you, in CC3K is a monster that climbs up floors in the dungeon to reach exit.

1 Demo using input

To read “cc3kfloor.txt” as input file, run as follows:

```
./cc3k cc3kfloor.txt
```

to use the default file and randomly generate game elements, run as follows:

```
./cc3k
```

to fix a seed, pass “cc3kfloor.txt” as the first commandline argument, then pass a number as the second commandline argument.

1.1 Demo 1

For Demo 1, use the following command to generate the game. “input4” is the file that contains a list of commands that plays the game from the start to the end (cat input4 to see the commands inside).

```
./cc3k default.txt 4 < input4
```

All graphs displayed in this subsection can be found in the output of this command when running in terminal. Here, we highlight the features that are shown in this demo1.

To see commands in input4 and the layout of default.txt, use following commands,

```
cat input4
cat default.txt
```

1. Initialization

command: t (initialize player race to troll)

Please select a race:

t

```
|-----|
|
| |-----| |-----| |
| |.....| |.....@.....L.|
| |...G.....E...L. +#####+ .....|-----|
| |.....G...H.....| # |.....M.....P. |--|
| |...G.....| # |...P.....H.P. |--|
| |-----+-----| # |-----+-----|
| # ##### |.....|
| # # |-----+-----| |.....|
| # # |.P.....| |.....|
| ##### |.....H...| #####+...G.....|
| # # |...M.G.P.| # |...M.....|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....D...| # # # |-----+-----| | |
| |...G.....GO..| ##### |.....|
| |...H.....H...| # # |.L.....|
| |.W.....P.| # |-----+-----| |...W.H..|
| |.....| # |.....G.....D.....|
| |...L...P.....+#####+H.P.D...P.....\G.....|
| |...W.....P.....| |...G.....|
| |-----| |-----|
|-----|
Race: troll Gold: 0 Floor: 1
HP: 120
ATK: 25
DEF: 15
```

The default.txt is read-in, pc, stair, potion, gold, enemies are spawn. Display shows the initial board.

2.

```

|-----|
| |-----| |-----|
| |.....E.....| |.....|
| |...G.....L+#####+.....M@.....|-----|
| |.....G.....| # |.....L.....P.|--|
| |...G.....H.....| # |...P.....P.....|--|
| |-----| # |-----|...H.....|
| # ##### |.....|
| # # |-----| |.....|
| # # |P...H....| |.....|
| ##### |.....| #####+...G.....|
| # # |...M...G.P..| # |...M.....|
| # # |-----| # |-----+-----|
| |-----+-----| # # # #
| |.....H.....D....| # # # |-----+-----| |
| |.....G.....OG...| ##### |.....|
| |W.....H.....| # # |.....|
| |...H.....P..| # |-----+-----|...WH..|
| |.....| # |..H.....G.....D.....L.....|
| |...L...P.....+#####+...P.D...P.....\G.....|
| |...W.....P.....| |...G.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 0

Floor: 1

HP: 120

ATK: 25

DEF: 15

You moved east.

3.

```

|-----|
| |-----| |-----|
| |-----| |-----M-----|
| |...G...H...+#####+-----|
| |...G...| # |...P.|-|
| |...G...E...L| # |...P...L...@...P...|-|
| |-----| # |-----+-----|...H...|
| # ##### |-----|
| # # |-----+-----| |M...|
| # # |P...| |...|
| ##### |...MH...| #####+...G...|
| # # |...G.P...| # |...|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |...D...| # # # |-----+-----| |
| |...G...G...| ##### |...|
| |W...O...| # # |...H...|
| |...P...| # |-----+-----|...W...|
| |L...H...| # |...G...D...|
| |...W...P...H...+#####+HP.D...P...\.G...|
| |...H...P...| |...G...L...|
| |-----| |-----|
|-----|

```

Race: troll Gold: 0

Floor: 1

HP: 102

ATK: 25

DEF: 15

You moved east. human dealt 18 damage to you.

4.

```

|-----|
| |-----| |-----|
| |-----| |-----|
| |...G.....+#####+.....M.....|-----|
| |...G...H...L| # |...L.....P.|--|
| |...G.....E.....| # |...P.....@...P...|--|
| |-----| # |-----|...H.....|
| # ##### |.....|
| # # |-----| |.....|
| # # |P.....| |M.....|
| ##### |...M..H...| #####+...G.....|
| # # |...G.P..| # |.....|
| # # |-----| # |-----|
| |-----+-----| # # # #
| |...D...| # # # |-----| |
| |W.....G.....G...| ##### |.....|
| |.....| # # |.....|
| |...H.....O....P.| # |-----|...H.....|
| |..W.....H....| # |...H.....G.....D.....W|
| |...L.H...P.....+#####+...P.D...P.....\G..L.....|
| |...P.....| |...G.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 0

Floor: 1

HP: 107

ATK: 25

DEF: 15

human misses attack on PC. You dealt 21 damage to human.

5.

```

|-----|
| |-----| |-----|
| |.....M.....|
| |...G...HE...+#####+...L...|-----|
| |...G...L...# |.....P...|--|
| |...G...| # |...P...@...P...|--|
| |-----| # |-----|...H...|
| # ##### |.....|
| # # |-----| |.....|
| # # |P.....| |M.....|
| ##### |M.....| #####+...G.....|
| # # |.....GHP...| # |.....|
| # # |-----| # |-----|
| |-----+-----| # # # #
| |.....D...| # # # |-----|
| |W...H.G...G...| ##### |.....|
| |.....O...| # # |...H...|
| |...H.....P...| # |-----|
| |W...L...| # |...H...G...D...W...|
| |.....P.....+#####+...P.D...P...\.G...L...|
| |.....P...H...| |...G...|
| |-----| |-----|
|-----|

```

Race: troll Gold: 0

Floor: 1

HP: 102

ATK: 25

DEF: 15

You dealed 21 damage to human. human dealed 18 damage to you.

6.

```

|-----|
| |-----| |-----|
| |.....L| |.....M.....L|
| |...G...H.....+#####+.....|-----|
| |.....GE.....| # |.....P. |--|
| |...G.....| # |...P.....@...P... |--|
| |-----| # |-----|...G.....|
| # ##### |.....|
| # # |-----| |.....|
| # # |P.....| |.....G.....|
| ##### |...M...H...| #####+...G.....|
| # # |.....G.P..| # |M.....|
| # # |-----| # |-----|
| |-----+-----| # # # #
| |.....D...| # # # |-----|
| |W.....G....O..G...| ##### |H.....|
| |...H.....| # # |.....|
| |W....H.....P.| # |-----|
| |.....| # |.....G.....D..L.....|
| |.....P.....+#####+...P.DH...P.....\G.....W|
| |.....L.....P.H.....| |G.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 2 Floor: 1
 HP: 94
 ATK: 25
 DEF: 15
 You dealt 21 damage to human. PC slains H. Some gold is left on the floor.
 You saw some gold.

7.

```

|-----|
| |-----| |-----|
| |.....L| |.....M.....L|
| |...G.....H.....+#####+.....|-----|
| |.....GE.....| # |.....P. |--|
| |...G.....| # |...P.....@...P... |--|
| |-----| # |-----|...G.....|
| # ##### |.....|
| # # |-----| |.....|
| # # |P.....| |.....G.....|
| ##### |...M...H...| #####+...G.....|
| # # |.....G.P..| # |M.....|
| # # |-----| # |-----|
| |-----+-----| # # # #
| |.....D...| # # # |-----|
| |W.....G....O..G...| ##### |H.....|
| |...H.....| # # |.....|
| |W....H.....P.| # |-----|
| |.....| # |.....G.....D..L.....|
| |.....P.....+#####+...P.DH...P.....\G.....W|
| |.....L.....P.H.....| |G.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 2

Floor: 1

HP: 94

ATK: 25

DEF: 15

You dealt 21 damage to human. PC slains H. Some gold is left on the floor.

You saw some gold.

8.

```

|-----|
| |-----| |-----|
| |.....| |.....M.....|
| |.....G.....+#####+.....|-----|
| |.....G...H...L...| # |.....P.|--|
| |.....G.....E.....| # |.....P.....P.....|--|
| |-----| # |-----|.....|
| # ##### |.....|
| # # |-----| |.....|
| # # |P.....H..| |M.....|
| ##### |.....M.....| #####+.....L.....|
| # # |.....G.P..| # |.....|
| # # |-----| # |-----+-----|
| |-----+-----| # # # #
| |.....D...| # # # |-----| |
| |H...L..G.....HG...| ##### |.....|
| |.....H.....| # # |..W.....|
| |..W.....P..| # |-----|.....|
| |.....| # |.....G.....D.....L.....|
| |.....WP.O.....+#####+...P.DH...P.....\G.....|
| |.....P.....| |...G.....@.....H.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 8

Floor: 1

HP: 79

ATK: 25

DEF: 15

You moved west. dragon dealed 18 damage to you.

9.

```

|-----|
| |-----| |-----|
| |.....G.....L.....+#####+.....M.....|
| |.....E.G...H.....| # |.....P. |--|
| |.....G.....| # |.....P.....P..... |--|
| |-----| # |-----|
| # ##### |.....|
| # # |-----| |.....|
| # # |P.....H..| |.....|
| ##### |.....| #####+...M.L.....|
| # # |...M..G.P..| # |.....|
| # # |-----| # |-----+-----|
| |-----+-----| # # # #
| |H...L.....D...| # # # |-----+-----|
| |.....G.....HG...| ##### |.....|
| |.....H.....| # # |W.....|
| |W.....P..| # |-----+-----|
| |.....| # |.....G.....D.....L.H.....|
| |.....WP..O.....+#####+...P.D.H...P.....\G.....|
| |.....P.....| |.....G.....@.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 8

Floor: 1

HP: 71

ATK: 25

DEF: 15

You moved west.

```

|-----|
| |-----| |-----|
| |.....G.....| |.....|
| |...P..H.....L...G.....+#####+.....H.....P.. |--|
| |.....| # |.....| |--|
| |...WO...H..G.....P..| # |.....G.....G..... |--|
| |-----+-----| # |-----|
| # ##### |.....|
| # # |-----+-----| |.....G....|
| # # |...G.GD.H..| |.....P..|
| ##### |...DHP.....| #####+.....|
| # # |...G.....OG| # |.....\|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....| # # # |-----+-----|
| |P.....W...| ##### |.....|
| |.....L.....O| # # |.....|
| |.....P.....@..| # |-----+-----|
| |.....M.....| # |.....P.....O..L.W.....|
| |.....+#####+.....P.....P..|
| |.....W...W...H..| |O.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 8

Floor: 2

HP: 76

ATK: 25

DEF: 15

You moved north.

10.

```

|-----|
| |-----| |-----|
| |.....L...G.....| |.....|
| |...P...O.....G.....+#####+.....H.....P..|-----|
| |.....H.....| # |.....|--|
| |..H..W.....G.....P..| # |.....G...G.....|--|
| |-----+-----| # |-----+-----|
| | # |#####| |.....|
| | # | # |-----+-----| |.....G...|
| | # | # |...G.GD...| |.....P..|
| |#####| |...D.P..OH.|#####+.....|
| | # | # |...G..H...G| # |.....\|
| | # | # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....| # # # |-----+-----|
| |P.....O...|#####|.....|
| |.....L.....W..| # # |.....|
| |.....PQ.....| # |-----+-----|
| |.....M.....| # |.....P.....O.....W.....|
| |.....H+#####+.....O.....L...P...P..|
| |...W.....W.....| |.....|
| |-----| |-----|
|
|-----|

```

Race: troll Gold: 8

Floor: 2

HP: 106

ATK: 25

DEF: 15

You saw an unknown potion.

11.

```

|-----|
| |-----| |-----|
| |.....L...G.....| |.....|
| |...P...O.....G.....+#####+.....H.....P..|-----|
| |.....H.....| # |.....|---|
| |..H..W.....G.....P..| # |.....G....G.....|---|
| |-----+-----| # |-----+-----|
| # ##### |.....|
| # # |-----+-----| |.....G....|
| # # |....G.GD...| |.....P..|
| ##### |...D.P..OH.| #####+.....|
| # # |...G..H...G| # |.....\|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....| # # # |-----+-----|
| |P.....O...| ##### |.....|
| |.....L.....W..| # # |.....|
| |.....P@.....| # |-----+-----|
| |.....M.....| # |.....P.....O.....W.....|
| |.....H+#####+O.....L...P.....P..|
| |...W....W.....| |.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 8

Floor: 2

HP: 106

ATK: 25

DEF: 15

You saw an unknown potion.

12.

```

|-----|
| |-----| |-----|
| |.....G.....| |.....|
| |...P...O.L...G.....+#####+.....P..|-----|
| |...W.....| # |...H.....|--|
| |...H.....H.G.....P..| # |.....G.....G.....|--|
| |-----+-----| # |-----+-----|
| # ##### |.....|
| # # |-----+-----| |.....G.....|
| # # |...G.GD...| |.....P..|
| ##### |...D.PH...H| #####+.....|
| # # |...G...O..G| # |.....\|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....| # # # |-----+-----| |
| |P.....| ##### |.....|
| |.....L.....O....| # # |.....|
| |.....Q....W..| # |-----+-----|..W.....|
| |.....M.....H..| # |.....P.....|
| |.....W.....+#####+.....OL...P.....P..|
| |...W.....| |O.....|
| |-----| |-----|
|
|-----|

```

Race: troll Gold: 8

Floor: 2

HP: 111

ATK: 25

DEF: 10

You dranked WD.

13.

```

|-----|
| |-----| |-----|
| |...O...G...| |-----|
| |...P...G...+#####+...P..|-----|
| |...H...L...| # |...H...|---|
| |...W...H..G...P..| # |...G...G...|---|
| |-----| # |-----|
| # ##### |-----|
| # # |-----| |...G...|
| # # |...GHGD..H| |...P...|
| ##### |...D.P.O...| #####+...|
| # # |...G...G| # |...|\|
| # # |-----| # |-----|
| |-----+-----| # # # #
| |...| # # # |-----|
| |P...| ##### |...|
| |...W...| # # |W...|
| |...L.M...O..H..| # |-----|
| |...@...| # |...P...L...|
| |...W...+#####+O...O...P...P..|
| |...W...| |...|
| |-----| |-----|
|
|-----|

```

Race: troll Gold: 8

Floor: 2

HP: 88

ATK: 25

DEF: 10

dwarf misses attack on PC. You moved southeast. orcs dealt 28 damage to you.

14.

```

|-----|
| |-----| |-----|
| |.....P.....E.....L.....| |.....P.....|
| |...PH...GP.....E...| # |...G.....P.....|--|
| |.....WP.....G.....| # |.....|
| |-----| # |-----|
| # ##### |.....W.....|
| # # |-----| |.....|
| # # |.LL.....| |.....|
| ##### |.....ML.....| #####|.E.....|
| # # |.....\..| # |.....P.L...|
| # # |-----| # |-----|
| |-----| # # # #
| |.H.....| # # # |-----|
| |.....H...| ##### |.....|
| |P....GD...G.....| # # |.....|
| |...GD.....G.L.....| # |-----|
| |.....L.....| # |.....E.....M.....|
| |.....L+#####|.@.....H...P.....|
| |.....G| |.P.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 12

Floor: 3

HP: 120

ATK: 25

DEF: 15

You saw a bootle of WD.

```

|-----|
| |-----| |-----|
| |.....E.....| |.....|
| |...H.P.....L.E...+#####|.P.....|
| |.P..W.GP.....| # |...G.....P.....|--|
| |.....P.....G.....| # |.....|
| |-----| # |-----|
| # ##### |.....|
| # # |-----| |.....|
| # # |.....ML.....| |.....|
| ##### |.LL.....| #####|.E.....L..|
| # # |.....\..| # |.....P.....|
| # # |-----| # |-----|
| |-----| # # # #
| |.....| # # # |-----|
| |.H.....H...| ##### |.....|
| |P....GD...G.....| # # |.....|
| |...GD.....G.L.....| # |-----|
| |.....| # |.....|
| |.....L.....L.+#####|.@.....E.....M.....P.....|
| |.....G| |.....H.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 12

Floor: 3

HP: 120

ATK: 25

DEF: 10

You dranked WD.

15.

```

|-----|
| |-----| |-----|
| |.....H..G.....|
| |.....O...P.....P...+#####+...H.....G.....|-----|
| |.....P.D...HP...| # |.....L.....|--|
| |..GGD.L.....G.....| # |.....P...P.....|--|
| |-----| # |-----|
| # ##### |.....L...|
| # # |-----| |.....L...|
| # # |L.....P..| |.....G...|
| ##### |...E.@\..M.G| #####+.....|
| # # |.....G..D..| # |.....|
| # # |-----| # |-----|
| |-----| # # # #
| |..L.....| # # # |-----| |
| |.....P.....H| ##### |.....L...|
| |.....| # # |.....|
| |..E.H.....W.....| # |-----|G.....|
| |.....| # |.....L..G.....|
| |.....P.....L+#####+.....|
| |..W.....| |.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 12

Floor: 4

HP: 120

ATK: 20

DEF: 15

You moved northeast. You saw some gold.

16.

```

|-----|
| |-----| |-----|
| |.M...O..H..\...E| |.....|
| |...H...W.....+#####+O....G.....M...O..|-----|
| |.P...G...H.....D..| # |...L.....|---|
| |.....W.....G..| # |.....W.....P.....|---|
| |-----| # |-----|
| # ##### |.....|
| # # |---+---| |.....|
| # # |.L.....G..| |.....|
| ##### |...GO...D..| #####+P...P.....|
| # # |GP.....| # |.....|
| # # |---+---| # |---+---|
| |---+---| # # # #
| |...O.....| # # # |---+---| |
| |.....| ##### |...GD.....|
| |.....| # # |.....|
| |.....OP..| # |---+---|..P.....|
| |.....| # |.....O.....P|
| |.P.....+#####+.....D.....|
| |.....W.....| |.....L.....@G.....|
| |-----| |-----|
|
|-----|

```

Race: troll Gold: 13

Floor: 5

HP: 107

ATK: 20

DEF: 15

dragon misses attack on PC. Dragon is still alive, you cannot pick up the Dragon Hoard. You saw some gold.

17.

```

|-----|
| |-----| |-----|
| |.....H.\.....E| |.....|
| |...M...H..O.W.....+#####+O.....G.....|-----|
| |.P...G.....D..| # |.....L.....|--|
| |.....H....W....G.| # |.....W.....M..O...P.....|--|
| |-----+-----| # |-----+-----|.....|
| | # |#####|.....|
| | # | # |-----+-----|.....|
| | # | # |...L....G.|.....|
| | ##### |...GO...D..| #####+P...P.....|
| | # | # |GP.....| # |.....|
| | # | # |-----+-----| # |-----+-----|
| | |-----+-----| # | # | # | # |
| | |.....O.....| # | # | # | |-----+-----|
| | |.....| ##### |...GD.....|
| | |.....| # | # |.....|
| | |.....P.| # |-----+-----|..P.....|
| | |.....O..| # |.....L.....P|
| |..P....W.....+#####+.....O.....D.....|
| | |.....| |.....@.....|
| |-----| |-----|
|-----|

```

Race: troll Gold: 15

Floor: 5

HP: 99

ATK: 20

DEF: 15

Dragon is still alive, you cannot pick up the Dragon Hoard. dragon dealed 18 damage to you.

18.

```

|-----|
| |-----| |-----|
| |.....M.\.....| |.....O.....|
| |..H..H...E.....H...+#####+.....GM.....|-----|
| |.P..W.G.O.....WD..| # |.L.....O..W.....|--|
| |.....G..| # |.....P.....|--|
| |-----+-----| # |-----+-----| |.....|
| | # |#####| |.....|
| | # | # |-----+-----| |.....|
| | # | # |.....G..| |.....|
| | @##### |...GO...D..| #####+P...P.....|
| | # | # |GPL.....| # |.....|
| | # | # |-----+-----| # |-----+-----|
| | |-----+-----| # # # #
| | |.....| # # # |-----+-----| |
| | |..O.....| ##### |...GD.....|
| | |.....| # # |.....|
| | |.....P..| # |-----+-----|..P.....|
| | |.....O.....| # |.....P|
| | |.P.W.....+#####+.....L..O.....D.....|
| | |.....| |.....G.....|
| |-----| |-----|
|-----|
Race: troll Gold: 15 Floor: 5
HP: 120
ATK: 20
DEF: 15

```

19.

```

|-----|
| |-----| |-----|
| |.....M.@\.....| |.....L.....O.....|
| |...H.....E..O.....+#####+.....G..M.....|-----|
| |.P...GH.....HW.D..| # |.....|---|
| |...W.....G..| # |.....WO.....P.....|---|
| |-----| # |-----|.....|
| | # |#####|.....|
| | # | # |-----+-----| |.....|
| | # | # |.....G..| |.....|
| |#####| |..O.G...D..| #####+P...P.....|
| | # | # |GP.L.....| # |.....|
| | # | # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....| # # # |-----+-----| |
| |.....| #####|.....GD.....|
| |.....O..| # # |.....|
| |.....P..| # |-----+-----|..P.....|
| |..O...W.....| # |.....O.....P|
| |..P.....+#####+.....L.....D.....|
| |.....| |.....G.....|
| |-----| |-----|
|
|-----|

```

Race: troll Gold: 15

Floor: 5

HP: 76

ATK: 20

DEF: 15

You moved east. You reached the final stair. Your score is 15.

1.2 Demo 2

For Demo 2, use the following command to generate the game. “input” is the file that contains a list of commands that plays the game from the start.

```
./cc3k cc3kfloor.txt 1 < ccfloor_input
```

All graphs displayed in this subsection can be found in the output of this command when running in terminal. Here, highlight the features that are shown in this demo2.

1. Initialization:

In “input”, we chose troll for demo, after t and return, the board will be displayed, which is read in from “cc3kfloor.txt”, the following is the initial interatction.

Please select a race:

t

```
|-----|
| |-----| |-----|
| |.....@..P.....M.....| |.....GD.....|
| |.....P.....+#####+.....E.....|-----|
| |.....L.....| # |.....O.....GD..|--|
| |...O.....P.....| # |.....|-----|--|
| |-----+-----| # |-----+-----|.....|
| | # |#####| |.....W.....|
| | # | # |-----+-----| |P.....|
| | # | # |.....| |.....|
| |#####| |...W...P..|#####+.....|
| | # | # |.....| # |.....|
| | # | # |-----+-----| # |-----+-----|
| |-----+-----| | # | # | # |
| |.....\..P.....P...| # | # | # |-----+-----|
| |.....|#####| |.....|
| |.....P.....P...| # | # | |P.....|
| |...L.....| # |-----+-----|.....|
| |.....| # |.....P.....|
| |.....+#####+.....H.....H.....|
| |..G.....G.....| |.....G.....G...|
| |-----| |-----|
|-----|
Race: troll Gold: 0 Floor: 1
HP: 120
ATK: 25
DEF: 15
```

The initial stat for pc and floor and also the position of all game elements are all correct as you may check.

2. PC moves and Enemy Moves

Command: ea

```

|-----|
| |-----| |-----|
| |.....@.P.....| |.....GD.....|
| |.....LP.....M.....+#####+|-----|
| |.....0.....| # |.....E.....GD..|--|
| |.....P.....| # |.....0.....|--|
| |-----+-----| # |-----+-----|
| | # |#####| |.....|
| | # | # |-----+-----| |P.....W.....|
| | # | # |...W.....| |.....|
| | ##### | |.....P..| #####+|.....|
| | # | # |.....| # |.....|
| | # | # |-----+-----| # |-----+-----|
| |-----+-----| # | # | # |
| |...\.P.....P...| # | # | |-----+-----|
| |.....| |#####| |.....|
| |...L...P.....P...| # | # |P.....|
| |.....| # |-----+-----| |.....|
| |.....| # |.....P.....H.....|
| |.....+#####+|.....H.....|
| |..G.....G.....| |.....G.....G..|
| |-----| |-----|
|-----|
Race: troll Gold: 0 Floor: 1
HP: 106
ATK: 25
DEF: 15
You moved east. halfling dealt 14 damage to you. You saw an unknown potion.

```

In this round, the following features are shown:

- PC moves east.
- All enemies move randomly (except dragon which is always stationary).
- Halfling is beside PC so it attacks PC causing damage of 14. This damage is calculated using the formula in cc3k-villan.pdf.
- There is a potion on the bottomleft corner, and it is unknown, so a message is displayed saying “You saw an unknown potion”.

3. Drink Potion

Command: ea

```
|-----|
| |-----| |-----|
| |.....@P.....M.....| |.....GD.....|
| |.....LP.....+#####+.....E.....|-----|
| |.....0.....P.....| # |.....0.....GD..|--|
| |-----+-----| # |-----+-----| |-----|
| | # |#####| |-----+-----| |P.....|
| | # | # |.....W.....| |.....W.....|
| | # |#####| |.....P..|#####+.....|
| | # | # |.....| # |.....|
| | # | # |-----+-----| # |-----+-----|
| | |-----+-----| # # # #
| | |.....\..P.....P...| # # # |-----+-----| | |
| | |.....L.....P.....|#####| |.....|
| | |.....P.....P...| # # |P.....|
| | |.....P.....| # |-----+-----| |.....|
| | |.....| # |.....H...P.....H.....|
| | |.....+#####+.....|
| | |G.....G.....| |.....G.....G...|
| |-----| |-----|
|-----|
Race: troll Gold: 0 Floor: 1
```

HP: 97
ATK: 25
DEF: 15
You moved east. You saw an unknown potion. You saw an unknown potion. halfling dealt 14 damage to you.

Command: u ea

```
|-----|
| |-----| |-----|
| |.....@.....M.....| |.....GD.....|
| |.....LP.....+#####+.....|-----|
| |.....0.....P.....| # |.....E.....0.....GD..|--|
| |-----+-----| # |-----+-----| |-----|
| | # |#####| |-----+-----| |P.....|
| | # | # |.....W.....P..|#####+.....W.....|
| | # | # |.....| # |.....|
| | # | # |-----+-----| # |-----+-----|
| | |-----+-----| # # # #
| | |.....\..P.....P...| # # # |-----+-----| | |
| | |.....L.....P.....|#####| |.....|
| | |.....L..P.....P...| # # |P.....|
| | |.....P.....| # |-----+-----| |.....|
| | |.....| # |.....P.....|
| | |.....+#####+.....H.....H.....|
| | |G.....G.....| |.....G.....G...|
| |-----| |-----|
|-----|
Race: troll Gold: 0 Floor: 1
```

HP: 88
ATK: 25
DEF: 10
You drank WD. You saw an unknown potion. halfling dealt 14 damage to you.

In these two turns

- PC moves east
- Since the halfling is still near PC, it continues to deal damage to pc
- PC then use the unknown potion in the east

- The potion is a WD(wound Defence), the DEF line in the status area decreases by 10

4. PC Moves Through Chambers And Passages

Command: ea so so so...

```

|-----|
| |-----| |-----|
| |.....O...P@.....| |.....E....GD.....|
| |.....L.....M.....| +#####+ |-----|
| |.....P.....| # |.....O.....GD..|--|
| |-----+-----| # |-----+-----|
| # ##### |.....|
| # # |-----+-----| |P.....|
| # # |.....W.....| |.....|
| ##### |.....P..| #####+.....W.....|
| # # |.....| # |.....|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....\..P.....P...| # # # |-----+-----|
| |.....P.....P...| ##### |.....|
| |.....L.....| # |-----+-----|
| |.....| # |.....P.....|
| |.....+#####+.....H.....|
| |..G.....G.....| |.....G.....H.....G..|
| |-----| |-----|
|-----|
Race: troll Gold: 0 Floor: 1

```

HP: 84
 ATK: 25
 DEF: 10
 You moved south. You saw an unknown potion. halfling dealt 14 damage to you.

```

|-----|
| |-----| |-----|
| |.....O...L.....| |.....GD.....|
| |.....P.....M.....| +#####+ |-----|
| |.....P.....| # |.....E.....O.....GD..|--|
| |.....P.....| # |.....+-----|
| |-----+-----| # |-----+-----|
| # ##### |.....|
| # # |-----+-----| |P.....|
| # # |.....| |.....|
| ##### |W.....P..| #####+.....W.....|
| # # |.....| # |.....|
| @ # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....\..P.....P...| # # # |-----+-----|
| |.....L..P.....P...| # # |P.....|
| |.....| # |-----+-----|
| |.....P.....H.....|
| |.....+#####+.....H.....|
| |..G.....G.....| |.....G.....G.....|
| |-----| |-----|
|-----|
Race: troll Gold: 0 Floor: 1

```

HP: 101
 ATK: 25
 DEF: 10
 You moved south.

- We issue a series of command to move towards the chamber in the south
- Note that by design enemies can never leave its chamber
- Also note that HP is recovered at 5 per turn due to troll's ability

5. Attack Enemy

Command: a direction

```

|-----|
| |-----| |-----|
| |.....P..O..L.....M...| |.....GD.....|
| |.....P..O..L.....+#####+.....O..|-----|
| |.....P.....| # |...E.....GD..|--|
| |.....P.....| # |.....|-----|--|
| |-----+-----| # |-----+-----|W.....|
| # ##### |.....|
| # # |-----+-----| |P.....|
| # # |.....| |.....|
| ##### |...W....P..| #####+
| # |.....| # |.....|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |....\.....| # # # |-----+-----| |
| |.....| ##### |.....|
| |....@.....| # # |P.....|
| |....L.....| # |-----+-----|....H.....|
| |.....| # |.....P.....|
| |.....+#####+.....H.....|
| |..G.....G.....| |.....G.....G..|
| |-----| |-----|
|-----|

```

Race: troll Gold: 0

Floor: 1

HP: 107

ATK: 35

DEF: 20

You moved west. halfling dealed 13 damage to you.

```

|-----|
| |-----| |-----|
| |.....L.....M...| |.....GD...O..|
| |.....P..O.....+#####+...E.....|-----|
| |.....P.....| # |.....GD..|--|
| |.....P.....| # |.....|-----|--|
| |-----+-----| # |-----+-----|W.....|
| # ##### |.....|
| # # |-----+-----| |P.....|
| # # |...W.....| |.....|
| ##### |.....P..| #####+
| # |.....| # |.....|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |....\.....| # # # |-----+-----| |
| |.....| ##### |.....|
| |....@.....| # # |P.....|
| |....L.....| # |-----+-----|....H.....|
| |.....| # |.....H.....P.....|
| |.....+#####+.....|
| |..G.....G.....| |.....G.....G..|
| |-----| |-----|
|-----|

```

Race: troll Gold: 0

Floor: 1

HP: 99

ATK: 35

DEF: 20

PC misses attack. halfling dealed 13 damage to you.

```

|-----|
| |-----| |-----|
| |.....L.....| |.....GD.....O.|
| |.....P.....+#####+.....E.....|-----|
| |.....O.....M...| # |.....GD...|--|
| |.....P.....| # |.....|
| |-----+-----| # |-----+-----|.....|
| | # |#####| |W.....|
| | # | # |-----+-----| |P.....|
| | # | # |.....| |.....|
| |#####| |...W...P..|#####+.....|
| | # | # |.....| # |.....|
| | # | # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....\.....| # # # |-----+-----| |
| |.....|#####| |.....H.....|
| |.....@.....| # # |P.....|
| |.....L.....| # |-----+-----|.....|
| |.....| # |.....H.....P.....|
| |.....+#####+.....|
| |..G.....G.....| |.....G.....G..|
| |-----| |-----|
|-----|

```

Race: troll Gold: 0 Floor: 1
HP: 75
ATK: 35
DEF: 20
You dealt 30 damage to halfling. halfling dealt 13 damage to you.

```

|-----|
| |-----| |-----|
| |.....GD.....|
| |.....P.....M..+#####+.....E.....|-----|
| |.....L.....| # |.....O.....GD...|--|
| |.....O...P.....| # |.....|
| |-----+-----| # |-----+-----|.....|
| | # |#####| |W.....|
| | # | # |-----+-----| |P.....|
| | # | # |.....| |.....|
| |#####| |...W...P..|#####+.....|
| | # | # |.....| # |.....|
| | # | # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....\.....| # # # |-----+-----| |
| |.....|#####| |.....|
| |.....@.....| # # |P.....|
| |.....| # |-----+-----|...H.....|
| |.....| # |.....H.....P.....|
| |.....+#####+.....|
| |..G.....G.....| |.....G.....G..|
| |-----| |-----|
|-----|

```

Race: troll Gold: 1 Floor: 1
HP: 48
ATK: 35
DEF: 20
You dealt 30 damage to halfling. PC slains L.

- After collecting a few potions that boost ATK and DEF, PC proceeds to attack an enemy
- note that PC has a 50% chance of missing when attacking Halfling, as shown in the message line
- After PC killed the enemy, the Gold PC has automatically increases by 1

6. Collect Gold

```

|-----|
| |-----| |-----|
| |.....L.....| |.....GD.....|
| |.....P.....L.....M.+#####+.....E.....|-----|
| |.....O.....| # |.....GD..|--|
| |.....P.....| # |.....O.....|--|
| |-----| # |-----| |.....|
| # |#####| |.....|
| # # |-----| |P.....|
| # # |.....| |...W.....|
| ##### |.....P..| #####+.....|
| # # |...W.....| # |.....|
| # # |-----| # |-----+-----|
| |-----+-----| # # # #
| |...\......| # # # |-----+-----| | |
| |.....| ##### |.....|
| |.....| # # |P...H.....|
| |.....| # |-----+-----| |.....|
| |.....| # |.....P.....|
| |.....+#####+.....|
| |..G.....@G.....| |..H.....G.....G..|
| |-----| |-----|
|-----|

```

Race: troll Gold: 1

Floor: 1

HP: 83

ATK: 35

DEF: 20

You moved east. You saw some gold.

```

|-----|
| |-----| |-----|
| |.....L.....| |.....E.....GD.....|
| |.....P.....+#####+.....|-----|
| |.....O.....M..| # |.....O....GD..|--|
| |.....P.....| # |.....|--|
| |-----| # |-----| |.....|
| # |#####| |.....|
| # # |-----+-----| |P...W.....|
| # # |.....| |.....|
| ##### |.....P..| #####+.....|
| # # |...W.....| # |.....|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |...\......| # # # |-----+-----| | |
| |.....| ##### |.....|
| |.....| # # |P...H.....|
| |.....| # |-----+-----| |.....|
| |.....| # |.....P.....|
| |.....+#####+.....|
| |..G.....@.....| |..H.....G.....G..|
| |-----| |-----|
|-----|

```

Race: troll Gold: 3

Floor: 1

HP: 88

ATK: 35

DEF: 20

You picked up 2 piece(s) of gold.

```

|-----|
| |-----| |-----|
| |-----| |-----GD-----|
| |-----P-----+#####+-----E-----|-----|
| |-----M-----# |-----GD-----|--|
| |-----O..P..L-----# |-----|--|
| |-----+-----# |-----+-----|-----W-----|
| # ##### |O-----|
| # # |-----+-----| |P-----|
| # # |-----| |-----|
| ##### |-----W..P..| #####+-----|
| # # |-----| # |-----|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |....\-----| # # # |-----+-----| |
| |-----| ##### |-----|
| |-----| # # |P-----|
| |-----| # |-----+-----|-----|
| |-----| # |H-----P-----|
| |-----+#####+-----H-----|
| |..@-----| |-----G-----G-----|
| |-----| |-----|
|-----|

```

Race: troll Gold: 4

Floor: 1

HP: 120

ATK: 35

DEF: 20

You picked up 1 piece(s) of gold.

- Any gold is denoted by the character G on the map
- When PC moves to the same cell as the gold, it is automatically picked up and its value will be added to the Gold field.
- PC will not know the size of the gold until its picked up

7. Goes to next floor

Command: no ea ...

```

|-----|
| |-----| |-----|
| |.....GD.....|
| |.....P.....+#####+.....|-----|
| |.....O.....L | # | .....GD..|--|
| |.....P.....M. | # | .....E.....|--|
| |-----+-----| # |-----+-----|...W.....|
| | # |#####| |.....|
| | # | # |-----+-----| |P.....|
| | # | # |.....| |.....O.....|
| |#####| |.....W.P..|#####+.....|
| | # | # |.....| # |.....|
| | # | # |-----+-----| # |-----+-----|
| |-----+-----| # | # | # | # |
| |...@\.....| # | # | # |-----+-----|
| |.....|#####| |.....|
| |.....| # | # |P.....|
| |.....| # |-----+-----|.....|
| |.....| # |.....P.....H...|
| |.....+#####+.....H.....|
| |.....G.....G.....G..|
| |-----| |-----|
|-----|
Race: troll Gold: 4 Floor: 1
HP: 120
ATK: 35
DEF: 20
You moved east.

```

```

|-----|
| |-----| |-----|
| |.....@\..P.....M.....| |.....GD.....|
| |.....P.....+#####+.....E.....|-----|
| |.....L.....| # | .....O.....GD..|--|
| |.....O.....P.....| # | .....|--|
| |-----+-----| # |-----+-----|.....|
| | # |#####| |.....W.....|
| | # | # |-----+-----| |P.....|
| | # | # |.....| |.....|
| |#####| |...W...P..|#####+.....|
| | # | # |.....| # |.....|
| | # | # |-----+-----| # |-----+-----|
| |-----+-----| # | # | # | # |
| |...\.P.....P...| # | # | # |-----+-----|
| |.....|#####| |.....|
| |.....P.....P...| # | # |P.....|
| |...L.....| # |-----+-----|.....|
| |.....| # |.....P.....|
| |.....+#####+.....H.....H.....|
| |..G.....G.....| |.....G.....G..|
| |-----| |-----|
|-----|
Race: troll Gold: 4 Floor: 2
HP: 120
ATK: 25
DEF: 15
You moved east.

```

- Floor is denoted by the character \ on the map
- When PC moves on to the cell marked floor, PC is automatically sent to the next floor
- The current floor is displayed at the right of the first status line

8. Dragon and Dragon Hoard

```

|-----|
| |-----| |-----|
| |...L...M...| |...GD...|
| |...P...M...+#####+...E...@...O...|-----|
| |...O...| # |...GD...|--|
| |...| # |...W...|--|
| |-----| # |-----|
| # ##### |
| # # |-----| |P...|
| # # |...| |...|
| ##### |...P...| #####+...|
| # # |W...| # |...|
| # # |-----| # |-----|
| |-----+-----| # # # #
| |...\.P...P...| # # # |-----| |
| |...| ##### |...|
| |...P...P...| # # |P...|
| |...| # |-----+-----|H...|
| |...L...| # |...P...|
| |...+#####+...|
| |.G...G...| |...G.H...G...|
| |-----| |-----|
|
|-----|

```

Race: troll Gold: 4

Floor: 2

HP: 101

ATK: 30

DEF: 10

You moved east. dragon dealt 19 damage to you.

```

|-----|
| |-----| |-----|
| |...L...M...| |...GD...|
| |...P...M...+#####+...@O...|-----|
| |...O...| # |...GD...|--|
| |...| # |E...|--|
| |-----| # |-----|
| # ##### |
| # # |-----| |P...|
| # # |...| |...|
| ##### |W...P...| #####+...|
| # # |...| # |...|
| # # |-----| # |-----|
| |-----+-----| # # # #
| |...\.P...P...| # # # |-----| |
| |...| ##### |H...|
| |...P...P...| # # |P...|
| |...L...| # |-----+-----|...|
| |...| # |...P...|
| |...+#####+...H...|
| |.G...G...| |...G...G...|
| |-----| |-----|
|
|-----|

```

Race: troll Gold: 4

Floor: 2

HP: 50

ATK: 30

DEF: 10

orcs misses attack on PC. You dealt 24 damage to orcs. dragon dealt 19 damage to you.


```

|-----|
| |-----| |-----|
| |.....G.....|
| |.....P.....M.....+#####+.....@.....|-----|
| |.....L.....| # |.....E.....GD..|--|
| |.....O.....| # |.....|-----|
| |-----+-----| # |-----+-----|.....|
| # |#####| |.....W.....|
| # # |-----+-----| |P.....|
| # # |.....| |.....|
| ##### |.....P..| #####+
| # # |.....W.....| # |.....|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....\..P.....P...| # # # |-----+-----| |
| |.....|#####| |.....H.....|
| |.....P.....P...| # # |P.....|
| |.....L.....| # |-----+-----|.....|
| |.....| # |.....P.....|
| |.....+#####+.....H.....|
| |..G.....G.....| |.....G.....G..|
| |-----| |-----|
|-----|

```

Race: troll Gold: 7 Floor: 2
 HP: 71
 ATK: 30
 DEF: 10
 You dealt 25 damage to dragon. PC slains D.

```

|-----|
| |-----| |-----|
| |.....@.....|
| |.....L.P.....M.....+#####+.....|-----|
| |.....O.....| # |.....GD..|--|
| |.....| # |.....E.....|-----|
| |-----+-----| # |-----+-----|.....|
| # |#####| |.....W.....|
| # # |-----+-----| |P.....|
| # # |.....| |.....|
| ##### |.....W..P..| #####+
| # # |.....| # |.....|
| # # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....\..P.....P...| # # # |-----+-----| |
| |.....|#####| |.....|
| |.....P.....P...| # # |P..H.....|
| |.....L.....| # |-----+-----|.....|
| |.....| # |.....H....P.....|
| |.....+#####+.....|
| |..G.....G.....| |.....G.....G..|
| |-----| |-----|
|-----|

```

Race: troll Gold: 13 Floor: 2
 HP: 76
 ATK: 30
 DEF: 10
 You picked up 6 piece(s) of gold.

- Dragon always guards a dragon hoard and unlike other enemies, it is stationary.
- Dragon will attack PC when PC is near the dragon hoard it guards, even when PC is not near the dragon and cannot attack it.
- Dragon Hoard cannot be picked up until the dragon guarding it is killed.
- Also note that if multiple enemies are near PC, they can all attack you. However PC can only attack one enemy at a time (specified by the direction)
- After killing the dragon, PC proceeds to collect the dragon hoard.

9. Merchant Behaviour

```

|-----|
| |-----| |-----|
| |...L...P...| |...GD...|
| |...P...+#####+|-----|
| |..O...M@...| # |...GD..--|
| |...| # |...E...O...W|--|
| |-----| # |-----|
| # ##### |
| # # |-----| |P...|
| # # |...W...| |
| ##### |...P...| #####+|
| # # |...| # |
| # # |-----| # |-----|
| |-----+-----| # # #
| |...\.P...P...| # # # |-----|
| |...L...| ##### |
| |...P...P...| # # |P...|
| |...| # |-----|
| |...| # |...P...H...|
| |...+#####+|
| |..G...G...| |...H..G...G...|
| |-----| |-----|
|
|-----|

```

Race: troll Gold: 13

Floor: 5

HP: 74

ATK: 30

DEF: 15

You moved north.

```

|-----|
| |-----| |-----|
| |...L...P...| |...GD...|
| |..O...P...+#####+|-----|
| |...M@...| # |...E...O...GD..--|
| |...| # |...| |--|
| |-----| # |-----|
| # ##### |
| # # |-----| |P...|
| # # |...W...| |
| ##### |...P...| #####+|
| # # |...| # |
| # # |-----| # |-----|
| |-----+-----| # # #
| |...\.P...P...| # # # |-----|
| |...L...| ##### |
| |...P...P...| # # |P...|
| |...| # |-----|
| |...| # |...P...H...|
| |...+#####+|
| |..G...G...| |...G...G...|
| |-----| |-----|
|
|-----|

```

Race: troll Gold: 13

Floor: 5

HP: 18

ATK: 30

DEF: 15

You dealt 29 damage to merchant. All merchants are now hostile to PC. merchant dealt 61 damage to you.

```

|-----|
| |-----| |-----|
| |..0.....P.....@G.| |.....GD.....|
| |.....P.....+#####+.....|-----|
| |.....| # |.....E.....GD..|--|
| |..L.....| # |.....|-----|
| |-----+-----| # |-----+-----|.....|
| | # |#####|.....|
| | # | # |-----+-----| |P.....|
| | # | # |.....| |.....0.....|
| |#####| |.....W.P..|#####+.....|
| | # | # |.....| # |.....W.....|
| | # | # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |.....\.....| # # # |-----+-----| |
| |.....|#####|.....|
| |.....| # # |P.....|
| |.....| # |-----+-----|.....|
| |.....| # |.....P.....|
| |.....L.....+#####+.....H.....|
| |..G.....G.....| |.....G...H.....G..|
| |-----| |-----|
|-----|

```

Race: troll Gold: 14

Floor: 5

HP: 69

ATK: 40

DEF: 25

You dealt 39 damage to merchant. PC slains M. Some gold is left on the floor. You saw some gold.

- By default, Merchant will not attack PC. Although like other enemyies, it will be stationary when PC is near it
- When PC attacks any merchant on any floor, all Merchant in the game will be hostile to PC, and will attack PC.
- When a merchant is killed, it will drop a merchant gold on the floor.

End Game

```

|-----|
| |-----| |-----|
| |.....P.....| |.....E.....GD.....|
| |.....P.....+#####+.....|-----|
| |O.....| # |.....GD..|--|
| |.....L.....| # |.....|--|
| |-----+-----| # |-----|
| | # |#####| |.....|
| | # | # |-----+-----| |P.....|
| | # | # |.....| |.....|
| |#####| |.....P..|#####+...O.....|
| | # | # |.....W..| # |...W.....|
| | # | # |-----+-----| # |-----+-----|
| |-----+-----| # # # #
| |... \@.....| # # # |-----+-----| | |
| |.....|#####| |.....|
| |.....L.....| # # |P.....|
| |.....| # |-----+-----| |.....|
| |.....| # |.....P.....|
| |.....+#####+.....H.....|
| |..G.....G.....| |.....G.....H.....G..|
| |-----| |-----|
|
|-----|

```

Race: troll Gold: 16

Floor: 5

HP: 120

ATK: 40

DEF: 25

You moved west. You reached the final stair. Your score is 16.

- When the player reaches the stair at the final (fifth) floor, the game is ended.
- The score is calculated as the pieces of gold PC collects at each floor.