**Transcript**

**Start the game. The screen shows the instruction to you. You can use these commands to play the game.**

1 ?- start.

You are a prince. Your princess has been taken away to a

secret chamber by your enemy. The journey is destined to be

dangerous and threatening! My hero! Go to rescue your lovely

princess! Take care!

Reminder: You can just take at most three objects.

Available commands are:

start. -- to start the game.

n. s. e. w. -- to go in that direction.

take(Object). -- to pick up an object.

drop(Object). -- to put down an object.

i. -- to see the objects that you are

currently holding.

use(Object). -- to use the object.

look. -- to look around you again.

instructions. -- to see this message again.

halt. -- to end the game and quit.

You are in a meadow.

Go north, arrive at the market.

Go east, arrive at the dark valley.

Go south, arrive at the wood village.

There is a gun here.

true.

**Take object.**

2 ?- take(gun).

OK.

true.

**Go to the north. You will get to know where you are currently, which direction you can go, and what objects you can get from this place.**

3 ?- n.

You are in the market.

Go south, arrive at the meadow.

There is a flashlight here.

There is a parachute here.

true.

**Take object.**

4 ?- take(flashlight).

OK.

true.

5 ?- take(parachute).

OK.

true.

**Look. When you do not know where you are and which direction you can go, you can command “look.”. It can tell you these messages.**

6 ?- look.

You are in the market.

Go south, arrive at the meadow.

true.

**Go to the south.**

7 ?- s.

You are in a meadow.

Go north, arrive at the market.

Go east, arrive at the dark valley.

Go south, arrive at the wood village.

true.

**Go to the east. You want to go to the dark valley. But you must use flashlight to walk in the dark valley. And what’s more, the flashlight will work if and only if you also have batteries.**

**The situation is that you do not have batteries, so you still stay in the meadow. You cannot go to death valley.**

8 ?- e.

You do not have the batteries. You cannot use the flashlight.

You can't go that way.

true.

9 ?- s.

You are in the wood village.

Go north, arrive at the meadow.

Go east, arrive at the death valley.

There is a boat here.

There is a batteries here.

There is a tent here.

true.

**Take objects. The message shows that you have already have three objects. You can just hold at most three items. So you fail to take batteries.**

10 ?- take(batteries).

You can just take at most three objects. To take the

object you want, you must drop something.

true.

**Drop objects. In order to take batteries, the player drop the items he has.**

11 ?- drop(parachute).

OK.

true.

12 ?- take(batteries).

OK.

true.

13 ?- look.

You are in the wood village.

Go north, arrive at the meadow.

Go east, arrive at the death valley.

There is a boat here.

There is a tent here.

There is a parachute here.

true.

**i. Give an inventory of what the player holds currently.**

14 ?- i.

You have gun.

You have flashlight.

You have batteries.

true.

15 ?- e.

The death valley is full of zombies!

You are in the death valley. The zombies are coming!

Use your wisdom to kill all the zombies. Or, you can

leave in the west or north.

Go north, arrive at the dark forest.

Go west, arrive at the wood village.

Go south, there is a ghost lake.

true.

**Use something. The player uses gun to kill the zombies. If the players use other things, it will not work.**

16 ?- use(gun).

You have successfully killed all the zombies!

true.

17 ?- look.

You are in the death valley. There are no zombies.

You can be safe in the death valley.

Go north, arrive at the dark forest.

Go west, arrive at the wood village.

Go south, there is a ghost lake.

true.

18 ?- n.

You have the flashlight. You can walk in the dark forest.

You are in the dark forest. There lives an elderly

witch. Since you have saved her before, the witch gives

you a spell and a poison pill. They may be useful in the

coming journey.

Go west, arrive at the meadow.

Go south, arrive at the death valley.

There is a spell here.

There is a poison pill here.

true.

19 ?- take(spell).

You can just take at most three objects. To take the

object you want, you must drop something.

true.

20 ?- drop(gun).

OK.

true.

21 ?- take(spell).

OK.

true.

22 ?- look.

You are in the dark forest. There lives an elderly

witch. Since you have saved her before, the witch gives

you a spell and a poison pill. They may be useful in the

coming journey.

Go west, arrive at the meadow.

Go south, arrive at the death valley.

There is a poison pill here.

There is a gun here.

true.

23 ?- w.

You are in a meadow.

Go north, arrive at the market.

Go east, arrive at the dark valley.

Go south, arrive at the wood village.

true.

24 ?- s.

You are in the wood village.

Go north, arrive at the meadow.

Go east, arrive at the death valley.

There is a boat here.

There is a tent here.

There is a parachute here.

true.

25 ?- take(boat).

You can just take at most three objects. To take the

object you want, you must drop something.

true.

26 ?- drop(batteries).

OK.

true.

27 ?- look.

You are in the wood village.

Go north, arrive at the meadow.

Go east, arrive at the death valley.

There is a boat here.

There is a tent here.

There is a parachute here.

There is a batteries here.

true.

28 ?- e.

There is no zombies. You can walk in the death valley

safely.

true.

29 ?- look.

You are in the death valley. There are no zombies.

You can be safe in the death valley.

Go north, arrive at the dark forest.

Go west, arrive at the wood village.

Go south, there is a ghost lake.

true.

30 ?- w.

You are in the wood village.

Go north, arrive at the meadow.

Go east, arrive at the death valley.

There is a boat here.

There is a tent here.

There is a parachute here.

There is a batteries here.

true.

31 ?- take(boat).

OK.

true.

32 ?- e.

There is no zombies. You can walk in the death valley

safely.

true.

33 ?- s.

You have a boat and you can cross the river.

You are in the entrance of the secret chamber. There is

an oldstone gate in front of you. You need a key to open

the gate of the secret chamber!

Go north, arrive at the death valley.

true.

**You win the game.**

34 ?- use(spell).

You open the door of the secret chamber! You finally

see your lovely princess!

The game is over. Please enter the halt. command.

true.