Adventure in the Haunted House

Difficulty: Beginner
Constructs: conditionals, simple loops, arrays

1   Problem Description

For this assignment, you will write a simple adventure game that allows the player to explore a haunted house and search for the exit (of course, you need not use a haunted house; it could be a dank cave, a dark forest, or even a particularly messy bedroom. But for this assignment description, we will stick to a haunted house).

Your haunted house will consist of five rooms, which the player will explore one at a time. In each room, the player will be presented with a menu of three possible actions they could take in that room. Two of the three actions will result in the player's death, while the third (the "correct" action) will get the player to the next room. The player must get through all five rooms to win the game.

2   Example

A sample run of your program might look like this:

```
Welcome to the Haunted House - escape if you can!

Room 1 - Bedroom:
You wake up in a dark room.  You are on a bed.  There is no blanket.  It is
cold.  You are scared.  Do you...
1 - Go back to sleep
2 - Cry for your parental unit
3 - Get up and leave the room

> 3

The door to the bedroom opens easily and you step into a hall.
```

```
Room 2 - Hallway:
You are in a hallway.  At the far end, you see stairs leading down.  Suddenly,
a cheeky green ghost pops out of the wall and snickers at you.  Do you...
1 - Scream
2 - Shine your flashlight on him
3 - Punch him

> 2

The ghost spins around disoriented and then flees through the wall.

Room 3 - Staircase:
You are at the top of a sprial staircase that leads downwards.  Do you...
1 - Walk carefully down the stairs
2 - Slide down the staircase railing
3 - Take a running jump down the stairs

> 3

You die a horrible, haunted death.  No doubt your ghost will soon haunt this
haunted house like so many others.
```

3   Design

Although you are only asked to include five rooms in your adventure game, you should design your program such that it would be easy to add more. This means that you will have to use some useful tools, such as loops and arrays! To do so, follow the design guidelines below.

First, you should use an array to store the text descriptions of each room (including the menu for that room). In the example above, the first element of the array would store all the text associated with the bedroom as a single string. (Hint: you can use the \n character in the middle of your strings to indicate newlines)

Second, you will need another array to store the integer associated with the correct action in each room. In the example above, the first element of this array should be 3 (because option 3 was correct to proceed from Room 1) and the second element should be 2 (because option 2 was correct to proceed from Room 2 to Room 3).

Next, you should use a single loop to display the text of the various rooms to the player and to ask for their input. Your program should keep looping until either the player dies or reaches the exit. If you have properly set up the arrays described above, the code in this loop will not need to be very involved!

Finally, your program should inform the player whether they died or successfully escaped from the haunted house.