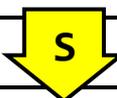# Design a Text Adventure Game

Use the boxes below to plan the content of your text adventure game. Try to include the following key points:

- An object that has to be picked up to complete the game (this could be a torch, for example)
- Leave instructions of some kind in the last room which lead you to something back in the first room (for example, maybe a secret object or message on the wall that is hidden until you turn on the torch?)

Room 1:	Aim of the game:
Description:	
Objects:	

N **S**

Room 2:	Room 3:
Description:	Description:
Objects:	Objects:

E **W**

PYTHON MAGIC

Creating a Text Adventure Game

Follow the instructions below to create your own text adventure game.

1. Open the Text Adventure Template. You'll notice that this has a 'Room' **class** that has been created for you; feel free to look at this but **don't change any of it**!

2. First you need to create your three rooms like this (note how these are laid out):

```
cave = Room("You are in a dark, spooky cave with bats hanging from the ceiling.",["stone", "orange"], ["South"])
forest = Room("You are in the forest, you can see a hut to the East.",["torch"],["North", "East"])
hut = Room("You are inside a tiny hut with a table in the corner.",["note"],["West"])
```

| Description of room | Objects | Exits |

3. Next you need to tell the game which room you want to start in. (This should be the first room in your design on the previous page). In this example it is the 'Cave':

```
currentRoom = "cave"
```

4. We then need to set a **boolean** variable of 'playingGame' to 'True' so our program knows that we are *playing the game!*

```
playingGame = True
```

5. One last variable that we need to create, for now, is our 'backpack' which is going to be a **list** of items we are carrying. At the moment we are carrying nothing so our list will just look like this:

```
backpack = []
```

6. Next, we are going to create a **function** to enable us to pick up items and add them to our backpack. This function is going to take three variables: the item to be picked up, the room you are in, and the current contents of your backpack:

```python
def pickupObject (item, myRoom, backpack):
    if item in myRoom.items:
        backpack.append(item)
        myRoom.items.remove(item)
        print ("I've picked up the " + item)
    elif item in backpack:
        print ("I'm already carrying it!")
    else:
        print ("I don't see that here.")
```

7. The next thing we need to do is create a 'game loop', we'll use a **while loop** that looks like this:

```python
while playingGame == True:
```

This means that the game will keep looping indefinitely until the game has been completed.

8. Inside the game loop you will need to put your code for each room of the game. In the example shown the player begins in the cave then has to collect the torch and read the note in the hut. They must then return to the cave and turn on the torch to find the magic potion!

You will need to **modify the code** shown on the next page below to suit your own game.

Remember, each of these blocks of code *must* be inside the
'playing game' loop:

Room 1 (Cave)

```python
while currentRoom == "cave":
    print (cave)
    userInput = input(">")
    if userInput == "south":
        currentRoom = "forest"
    elif (userInput == "north") or (userInput == "east") or (userInput == "west"):
        print ("There is no exit in that direction")
    elif "pick up" in userInput:
        pickupObject(userInput[8:len(userInput)], cave, backpack)
    elif userInput == "turn on torch":
        if "torch" in backpack:
            print ("Congratulations you have found the secret magic potion and won the game!")
            playingGame = False
            break
        else:
            print ("I'm not carrying a torch!")
    else:
        print ("Sorry I didn't understand that")
```

Room 2 (Forest)

```python
while currentRoom == "forest":
    print (forest)
    userInput = input(">")
    if userInput == "north":
        currentRoom = "cave"
    elif userInput == "east":
        currentRoom = "hut"
    elif (userInput == "south") or (userInput == "west"):
        print ("There is no exit in that direction")
    elif "pick up" in userInput:
        pickupObject(userInput[8:len(userInput)], forest, backpack)
    else:
        print ("Sorry I didn't understand that")
```

Room 3 (Hut)

```python
while currentRoom == "hut":
    print (hut)
    userInput = input(">")
    if userInput == "west":
        currentRoom = "forest"
    elif (userInput == "south") or (userInput == "west") or (userInput == "north"):
        print ("There is no exit in that direction")
    elif "pick up" in userInput:
        pickupObject(userInput[8:len(userInput)], hut, backpack)
    elif userInput == "read note":
        if "note" in backpack:
            print ("The note says 'return to the cave and find the secret magic potion'!")
        else:
            print ("You need to pick up the note first!")
    else:
        print ("Sorry I didn't understand that")
```

Now test out your game to see if it works!