

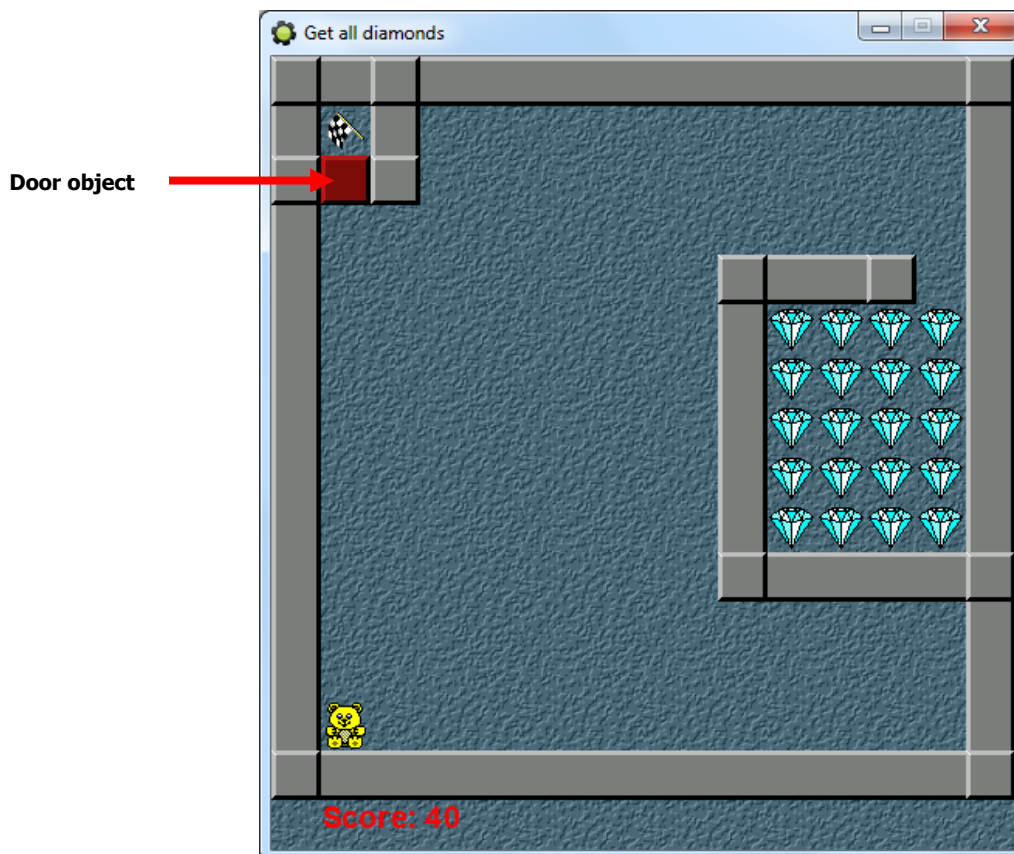
COUNTING THE NUMBER OF INSTANCES OF AN OBJECT

Sometimes it is important to know how many instances of an object occurs in a room. In our Maze Game, for example, the goal of the game is to collect diamonds. The diamonds itself are easy. But how do we make sure the player cannot exit the room when not all diamonds are collected?

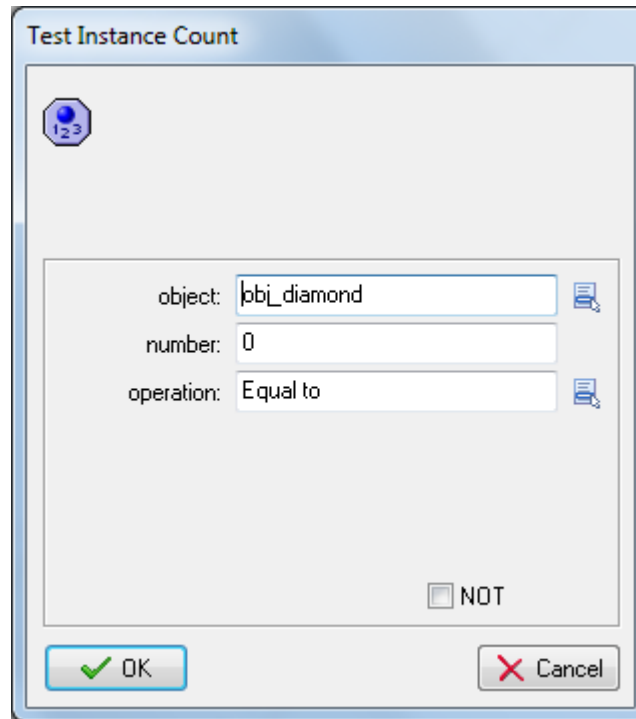


In order to make this work we will add a door object which behave like a wall as long as there are still diamonds left, and will disappear when all diamonds have gone.

1. The door object (**obj_door**) will be placed at a crucial place to block the passage to the goal. It will be solid (to block the person from passing it).

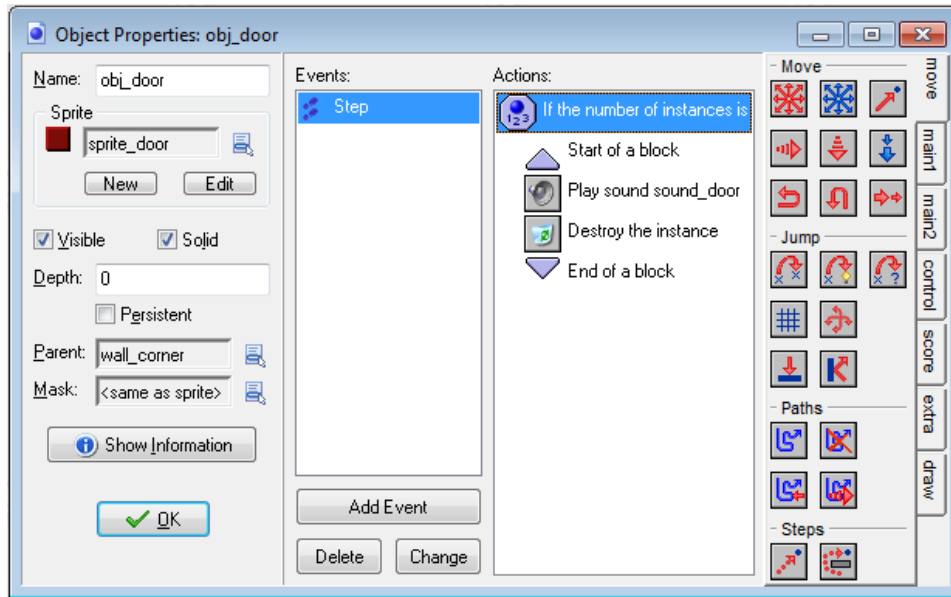


2. Now we're going to add a **Step Event** and add a **Test Instance Count** action that will check whether the number of diamonds is 0, and if it is 0, we will destroy the door.



The **Test Instance Count** properties requires you to specify the following parameters. For this action you need to specify an **object** and a **number**. If the current number of instances of the object is equal to the number, the question returns **true**, otherwise it returns **false**. You can also change the check to test whether the number of instances is **greater than** or **less than** the value you input. This type of check is typically used to check whether all instances of a particular type are gone, and so influences things like score, health or the game state.

3. Complete the **Step Event** by destroying the instance of the door and playing a sound effect (**snd_door**) if there are no more diamonds left.



Now add diamonds to the room and test the program by collecting all the diamonds to see if the door gets destroyed.