**Scenario 9 – Picking up trash and cleaning the park**

1. Open the program *Picking up trash and cleaning the park*. The code for moving the girl is already made. Sprites for waste (a bottle and a paper) and a trash bin are also given.

You will create more sprites (waste) that a girl will have to pick up and dump into a trash bin at the end.

1. Select the starting position for the girl and set the x and y coordinates. You can move the trash bin if you want (trash bin will always be in the same position, so you do not have to set the starting coordinates).

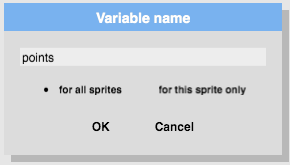
As always, write initial instructions.

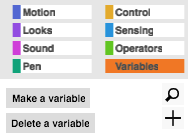
1. In order to check if the girl picked up all the trash, we have to count how many items has she picked up. To help with the counting, we will use a **variable**.

What is a variable?

A variable is like a box where we store some information. The name variable derived from the fact that its value may vary during the implementation.

We will make a variable *points* and with *points* we will count how many items the girl picked up.

How do we create a variable?



We click on the orange block *Variables*, then we select *Make a variable*, write its *name* and click *OK*.

**IMPORTANT!** The name of the variable should:

* make sense and name what the variable will represent – eg. *points*, *noOfTrash* etc.
* **not** contain non-English characters (eg. **č, š, ž** etc.),
* **not** include **spaces.** If we want to name the variable number of trash, we can name it *number\_of\_trash*, *numberOfTrash* or shorter *no\_of\_trash* or *noOfTrash* etc.



When we make a variable,

the variable appears on the left.

 A check mark in front of a   
variable indicates that the variable name and value appear in the background.

Since we have not picked up any trash at the beginning, the value of the variable *points* should be 0. We set this with this code:  


1. Now you will write a code for a *bottle*. When the girl touches the bottle, the bottle will disappear.

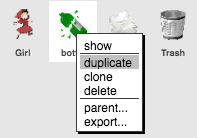
Think about:

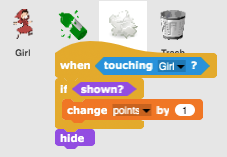
1. How can you check if the girl came to the bottle?
2. What happened to the bottle, when the girl touches it?
3. What happens with points?

**Test if number of points increases correctly.**

1. /Users/mateja.bevcic/Desktop/slike za navodila/9/C4G9_PobiranjeSmeti - Delno script pic (1).pngHint: Why would you use the following command?
2. Test again, click on the green flag. What happens?

1. When a code for one bottle is finished, you can copy the sprite bottle.

Right click on the bottle and select duplicate.  
A duplicated sprite appears somewhere in the background. Move it somewhere inside the maze. Copy the sprite bottle several times, so you will have more trash in your maze.

1. Now you have to write a code for a sprite *paper*.

The code is the same as it was for the bottle, so you can simply copy the entire code. Left click on the entire code, drag it on the sprite *paper* and drop it.

Copy the other parts of the bottle code in the same way.

1. Repeat the step 5) and copy the sprite *paper* like you copied the *bottle*.
2. The last thing is a code for the *trash*.  
   When the girl comes to the trash bin, the trash bin will tell her if she collected all the trash or not.

[Additional tasks]

You can add additional tasks according to you wishes or follow the tasks below:

* Add another type of waste (e.g. bio-waste).
* The trash can says e.g. “You picked up X bottles, Y papers and Z watermelons”.
* If a player picks up all the trash, the trash can says: “Congratulations! You picked up all the trash!”
* If a player does not pick up all the trash, the trash can tells him which trash has not been picked up, e.g. “You did not pick up all the bottles. You did not pick up all the watermelons.” and “Come back when you pick up all the trash”.

*Picking up trash and cleaning the park:* <https://snap.berkeley.edu/project?user=mateja&project=Picking%20up%20trash%20and%20cleaning%20the%20park%20-%20Part>