

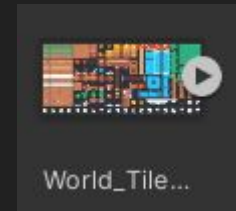
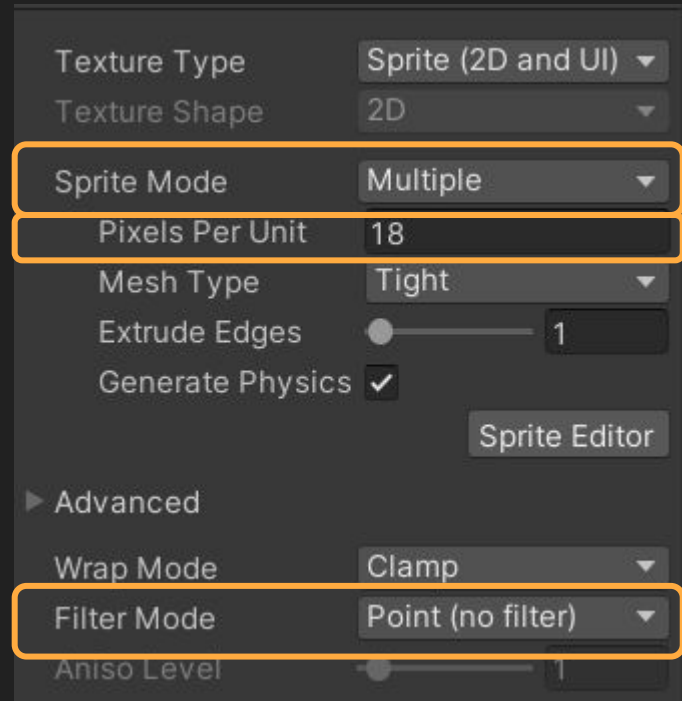
Homework 3 - Unity 2D

Scaling Your Image

First step of the homework is to click on the World_Tilemap image in the sprite folder

Make sure the

- Sprite mode is set to Multiple - This will let you slice the image
- Pixel Per Unit is 18 - This will make sure that the slices are correctly scaled in the tilemap
- And Filter Mode is set to Point(no filter) - This will make sure that the image is sharp not blurry.

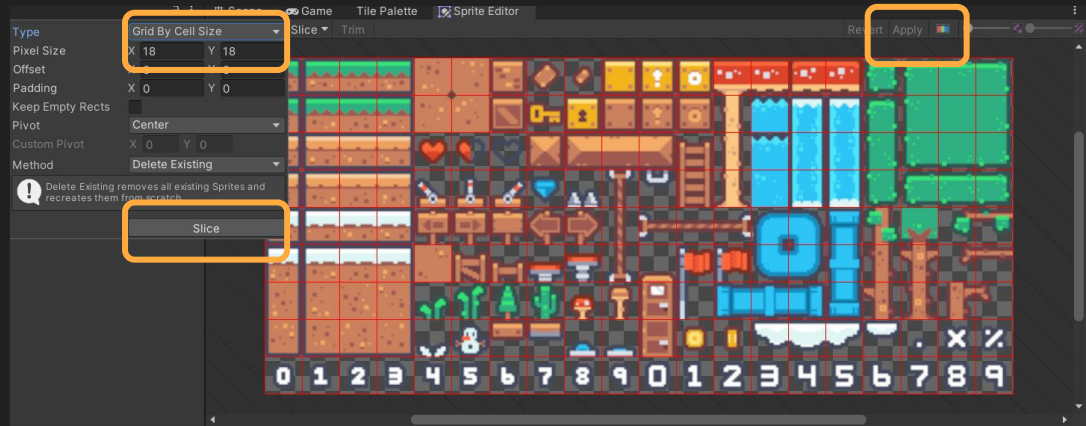
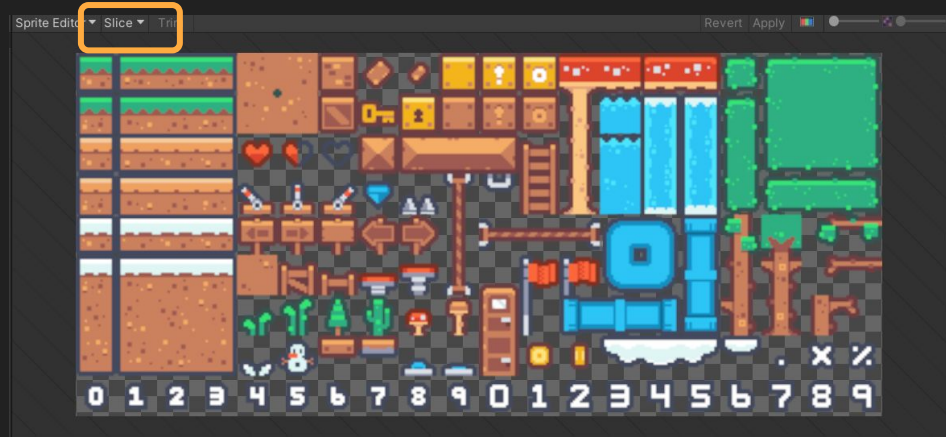


Scaling Your Image

Once you've pre set your image you will click Sprite Editor.

You click slice and set the mode to Grid by Grid and set the slicing to be 18 x 18, making each square that size.

When ready click Slice then apply.

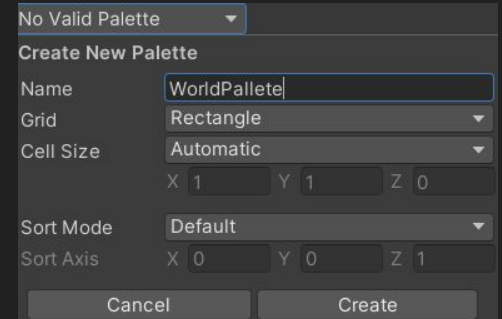
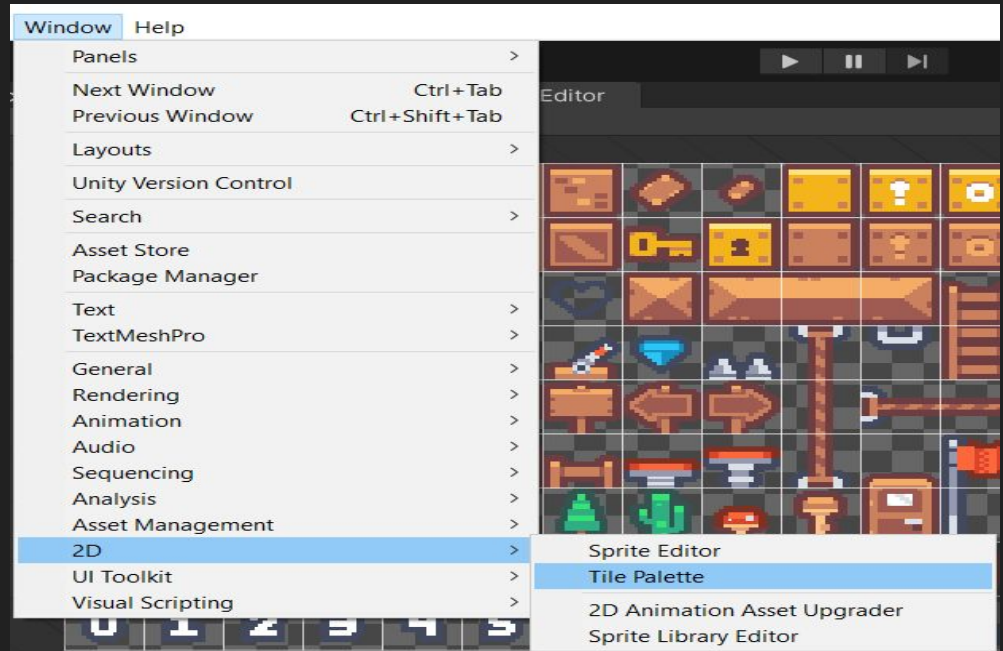


Create a Tile Palette

First open up the tilemap menu by clicking Window -> 2D -> Tile Palette

Click the drop down menu and create a new palette.

Name it whatever you want and create it. You will be asked to choose a folder, choose the Tile Palette Folder to create the Game Asset in.

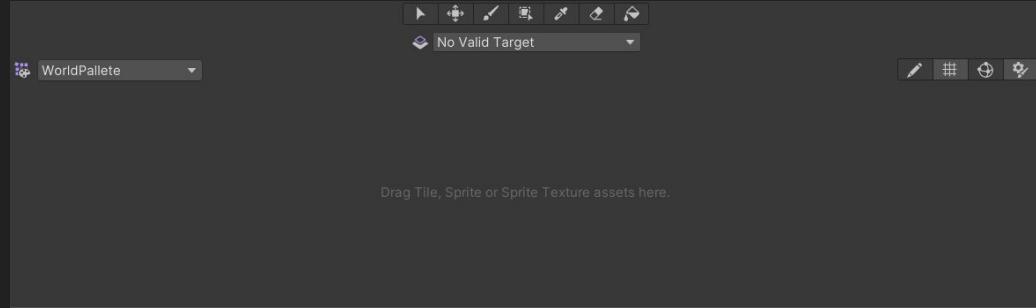


Getting Tile Palette

Once all of that is done you will have an empty palette.

Drag and drop the World Tilemap into the empty space.

You will be asked where to create the Game Assets, place them in the Tile folder and your palette will populate with tiles.

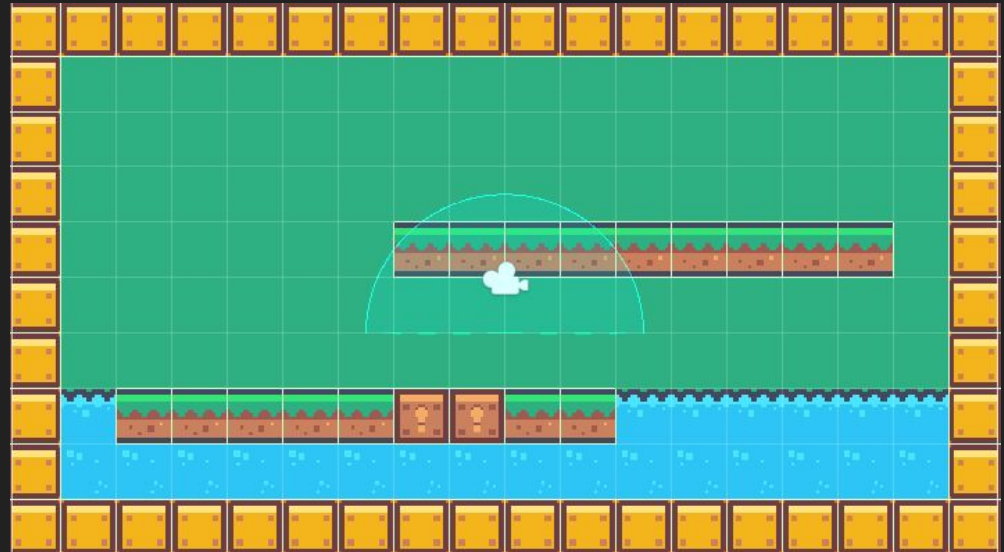


The Level

You will create 5 Rectangle Tilemaps. Do it by going to create 2D Object -> Tilemap.

Name them Floor, Walls, Background, Bounce and Water.

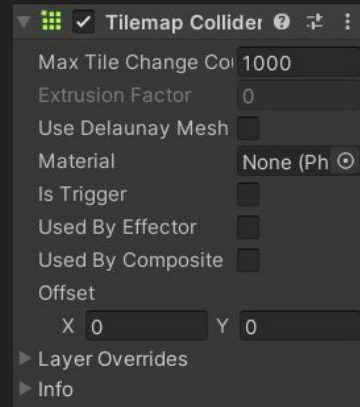
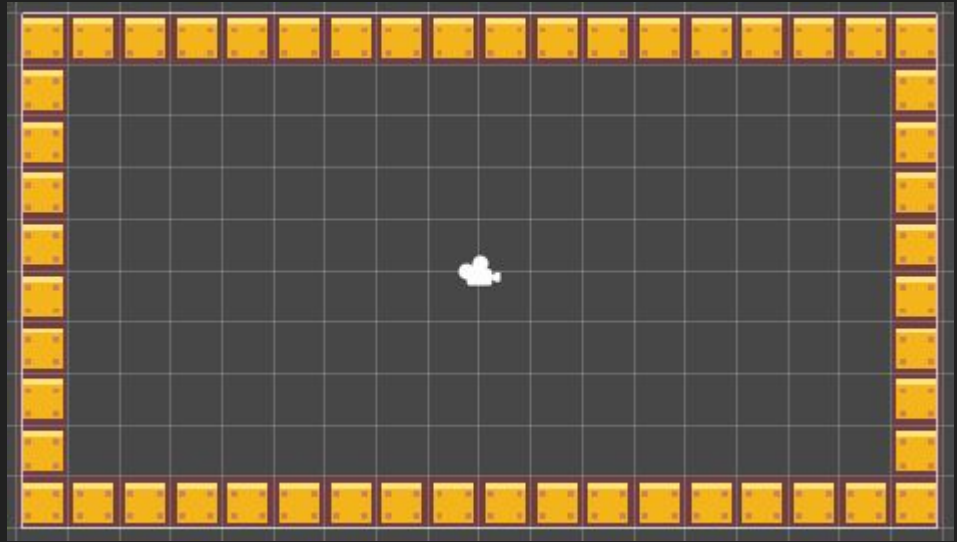
These will make up the gameworld.



Wall Tilemap

Using the Tile Palette draw a square of gold blocks around the level.

Make sure to add the Tilemap Collider. This will make sure you can't walk off the level.



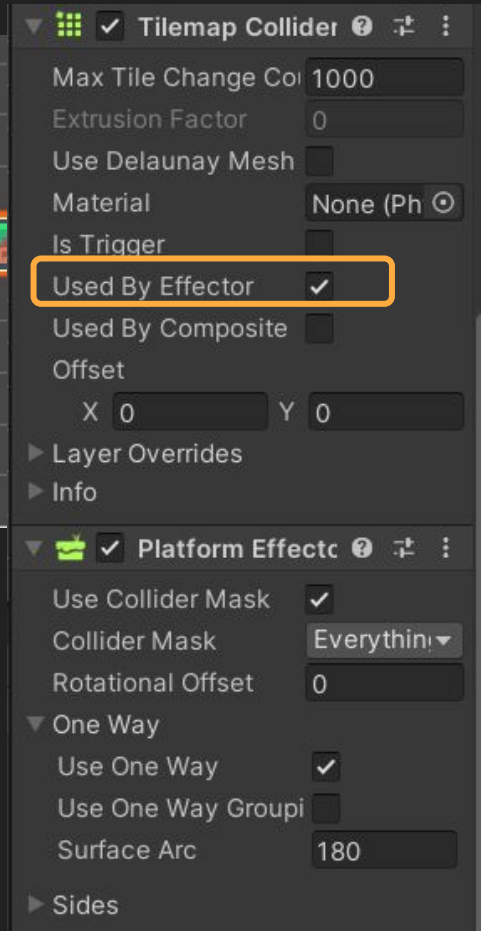
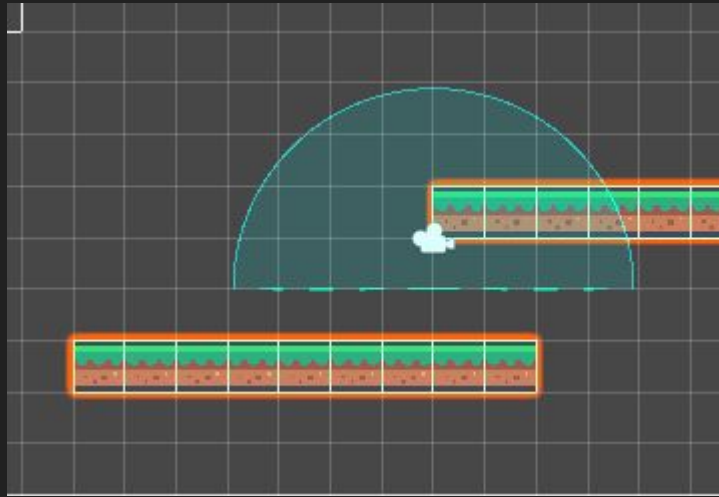
Floor Tilemap

Draw two lines using the grass over dirt tile.

Add the Tilemap Collider and a Platform Effector to it.

Make sure that the collider is set to use effector.

This will allow the player to stand on tile and jump on top of it from below.

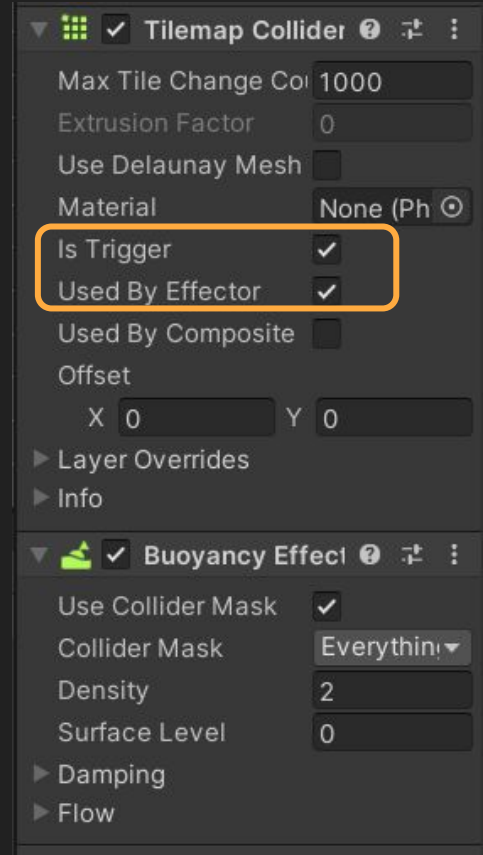
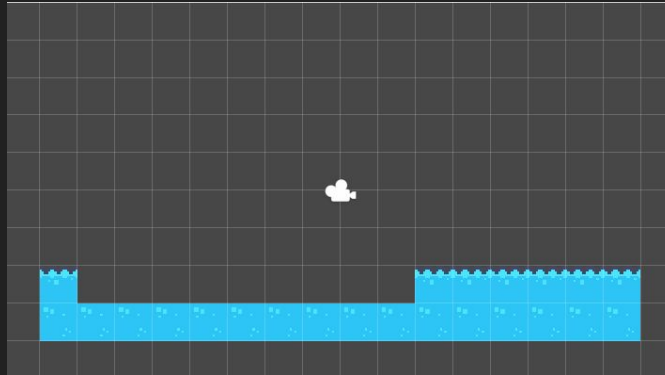


Water Tilemap

Draw water tiles in the remaining square between the grass and the land.

Make sure to attach a tilemap collider and a buoyancy effector this will allow you to make the character float on top of the water tiles.

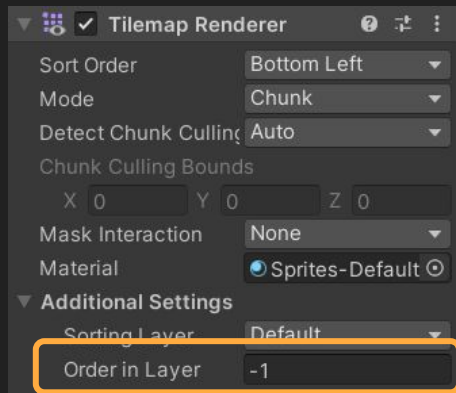
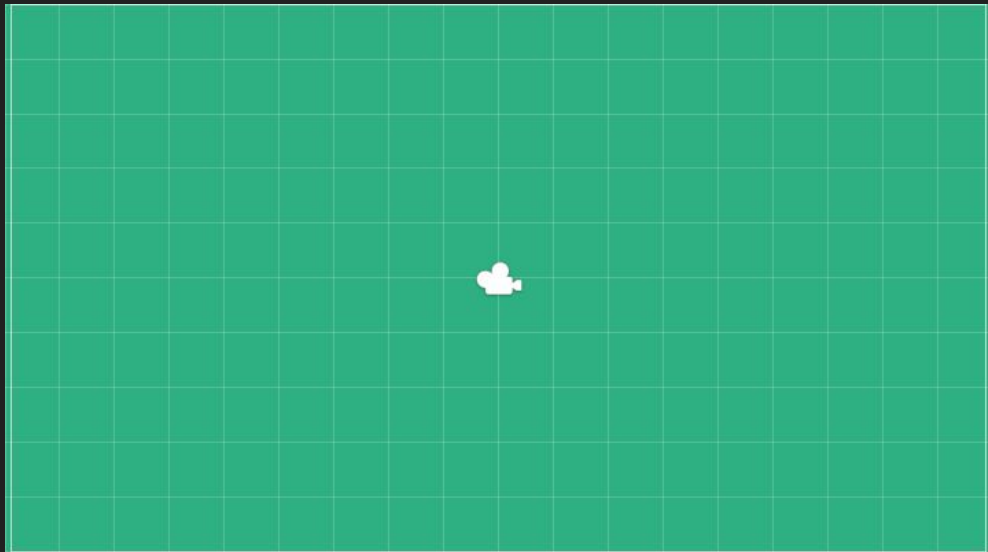
Make sure trigger and effector tabs are clicked on for this to work.



Background Tilemap

For the background layer just paint the entire area green.

In the Tilemap Renderer make sure that the Order in Layers is set to -1 so that it's always behind all of the other tilemaps.



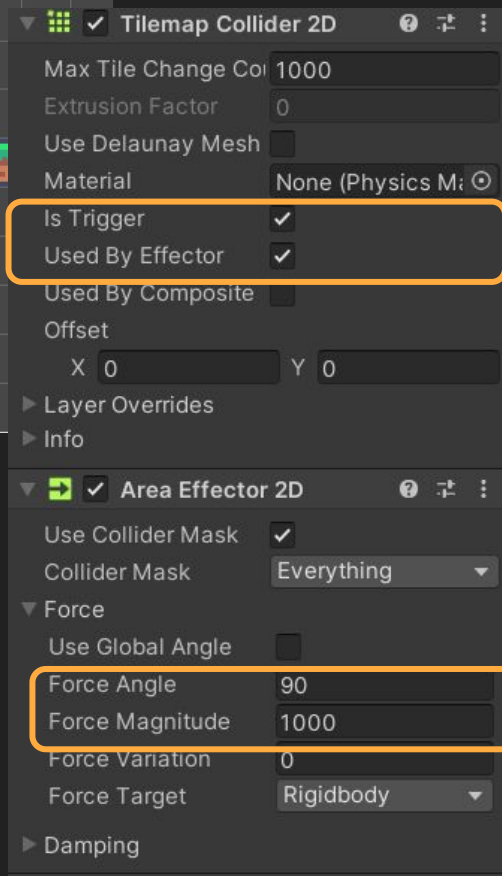
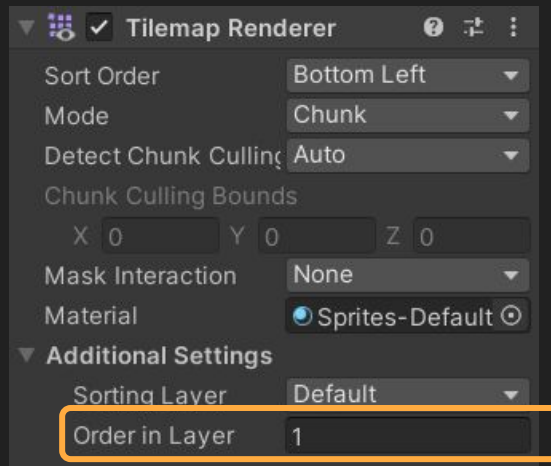
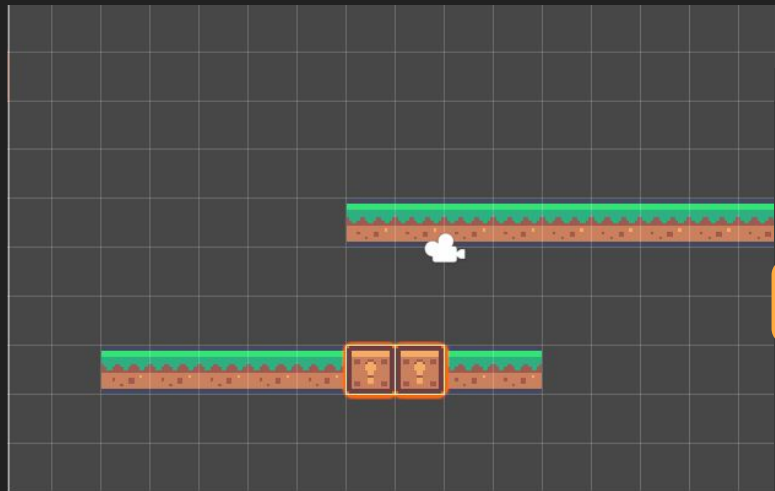
Bounce Tilemap

Finally place some brown power blocks on top of the floor tiles.

Make sure the render has Order in Layers set to 1 so it's always above the floor sprites.

Add a Tilemap Collider and a Area of Effect to make the player bounce.

Set the Angle to 90 so it shoot the player up with a high Force Magnitude. .



Add the Player

There is a Player Prefab, drag him into your scene click play and explore your level.

You Finished the Homework!

