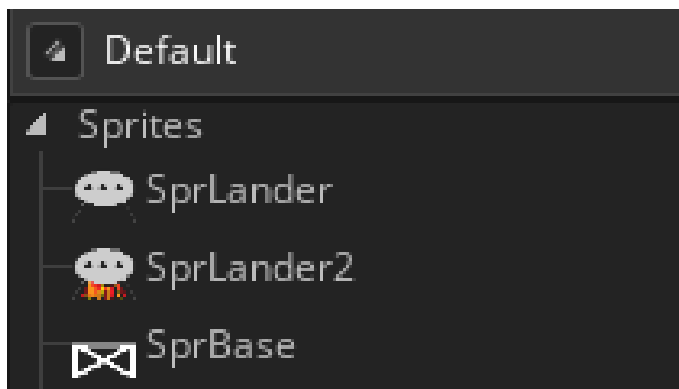


Create three sprites to represent a lunar lander, a lunar lander firing its rockets, and a base for it to land on.

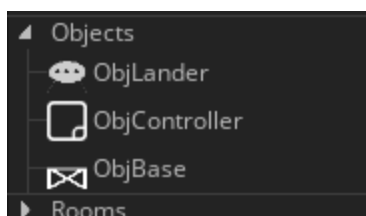


Create 3 Objects

Create ObjLander and connect it to SprLander

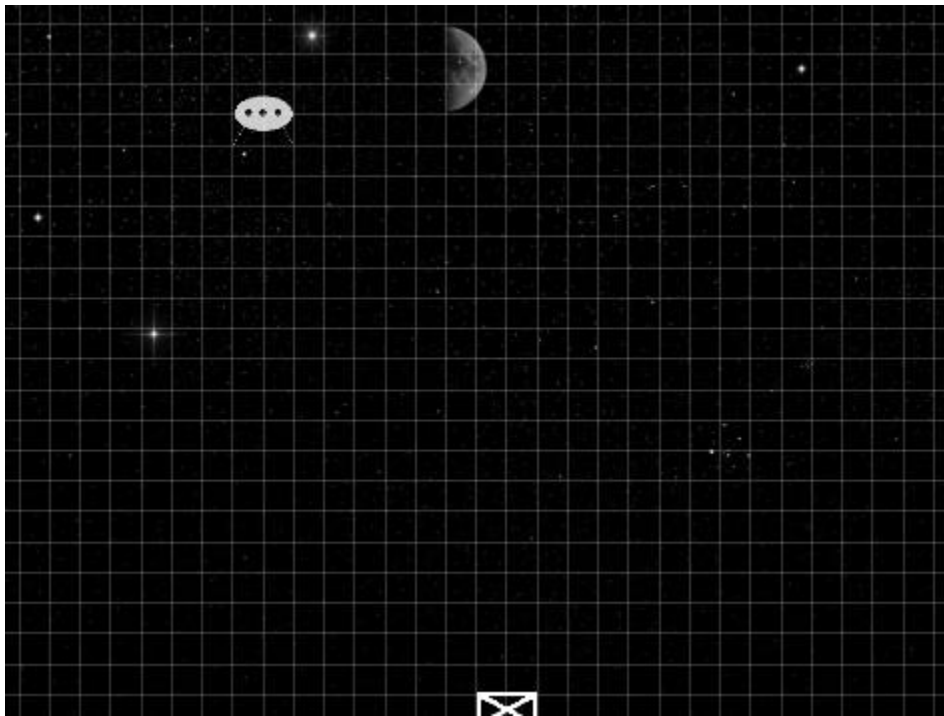
Create ObjBase and connect it to SprBase

Create ObjController



Create an 800 by 600 Room, add a space background.

Place The Lander, Base and controller in the room.



In the **Create Event** of **ObjLander**, Set a variable **Fuel** to **800**

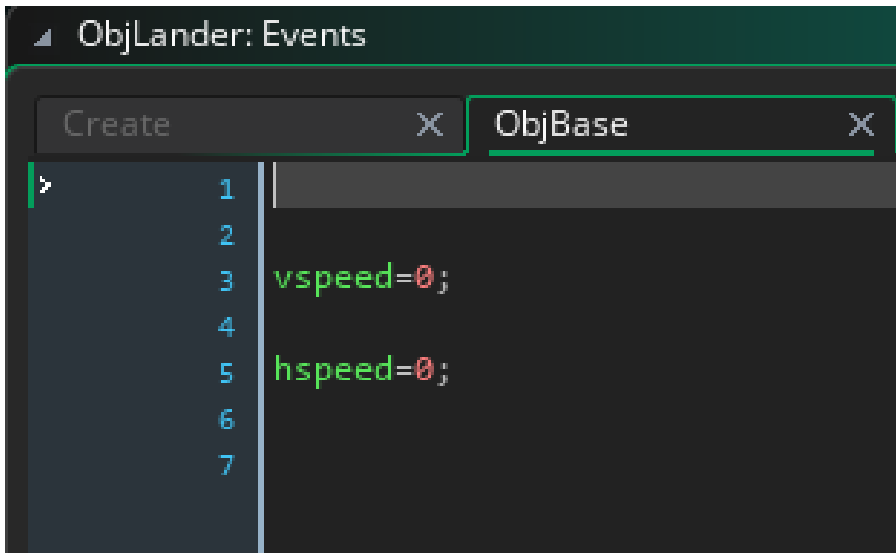
Set the **gravity** to **0.02**

Set **direction** to **270**

```
ObjLander: Create
Create
>
1
2 Fuel=800;
3
4 gravity=0.02;
5
6 direction= 270;
7
8
```

Collision with ObjBase

Set the Vertical and Horizontal speed to zero so the craft lands on the base.



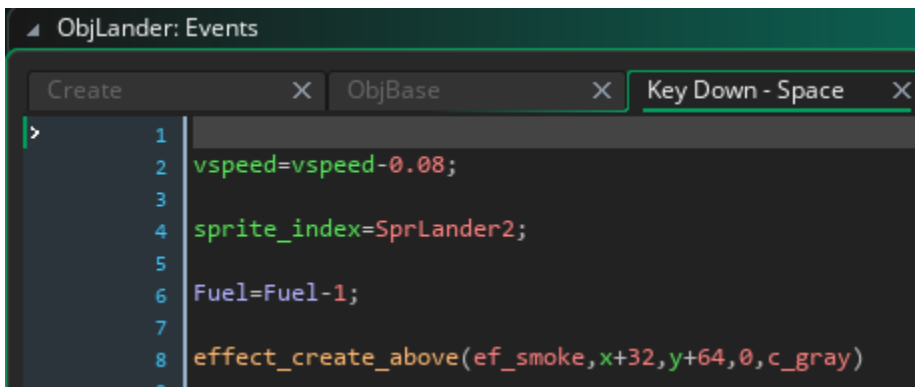
```
ObjLander: Events
Create X ObjBase X
> 1
2
3 vspeed=0;
4
5 hspeed=0;
6
7
```

In **Key Down Space** Set the **vertical speed** to **-0.08** to give the lander a boost up

Change Sprite in to **SprLander2** (this one has the rocket firing on it)

Subtract 1 from the **Fuel** value to use up some fuel.

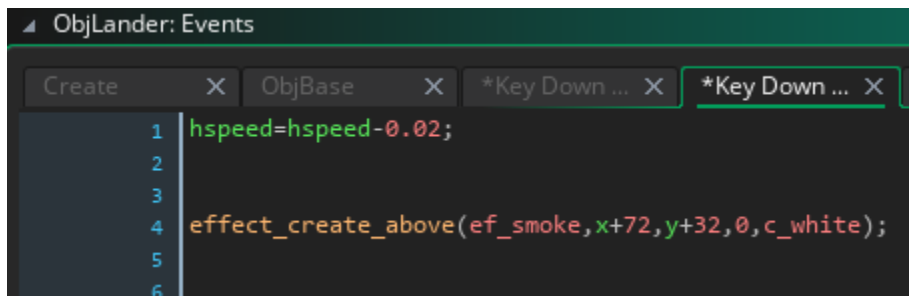
Create an explosion behind the spaceship to simulate the rocket firing



```
ObjLander: Events
Create X ObjBase X Key Down - Space X
> 1
2 vspeed=vspeed-0.08;
3
4 sprite_index=SprLander2;
5
6 Fuel=Fuel-1;
7
8 effect_create_above(ef_smoke,x+32,y+64,0,c_gray)
9
```

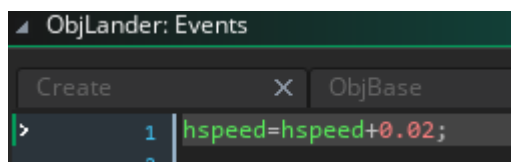
In Key Down Left and Key Down Right

In Left, subtract **0.02** from the **hspeed**, and use **effect_create_above** to create smoke from the thrusters.



```
ObjLander: Events
Create X ObjBase X *Key Down ... X *Key Down ... X
1 hspeed=hspeed-0.02;
2
3
4 effect_create_above(ef_smoke,x+72,y+32,0,c_white);
5
6
```

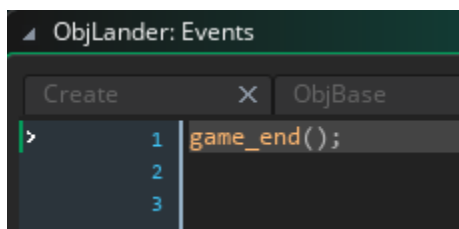
In Right, add **0.02** to the **hspeed**,



```
ObjLander: Events
Create X ObjBase X
> 1 hspeed=hspeed+0.02;
2
```

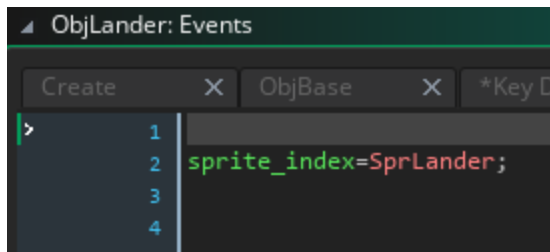
then use **Effect_create_above** to put an effect on the opposite side of the lander.

In Outside Room, End the game



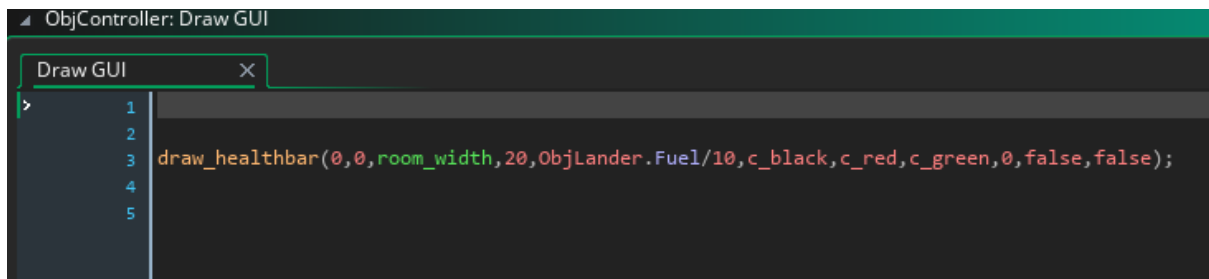
```
ObjLander: Events
Create X ObjBase X
> 1 game_end();
2
3
```

In Key Up - Space, Change Sprite in to Spr Lander



```
ObjLander: Events
Create X ObjBase X *Key D
1
2 sprite_index=SprLander;
3
4
```

In **ObjController**, in the Draw Gui event we will draw the fuel gauge using a **horizontal gradient**, we use **ObjLander.Fuel** as the variable to define the **x2** co-ordinate of the gradient. This means as the fuel variable goes down, the gradient box gets smaller, simulating a fuel gauge.



```
ObjController: Draw GUI
Draw GUI X
1
2
3 draw_healthbar(0,0,room_width,20,ObjLander.Fuel/10,c_black,c_red,c_green,0,false,false);
4
5
```