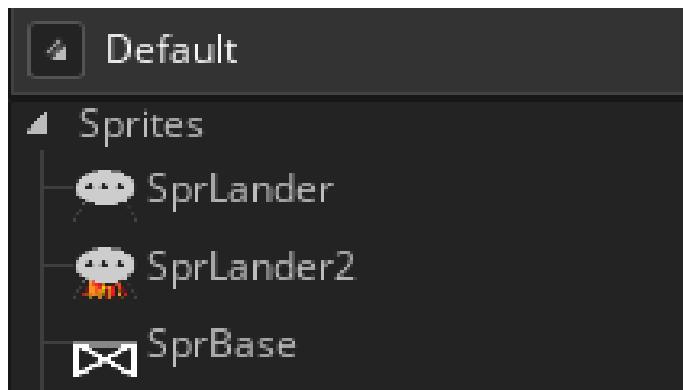


Create three sprites to represent a lunar lander, a lunar lander firing its rockets, and a base for it to land on.

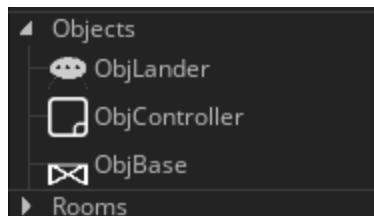


## Create 3 Objects

Create ObjLander and connect it to SprLander

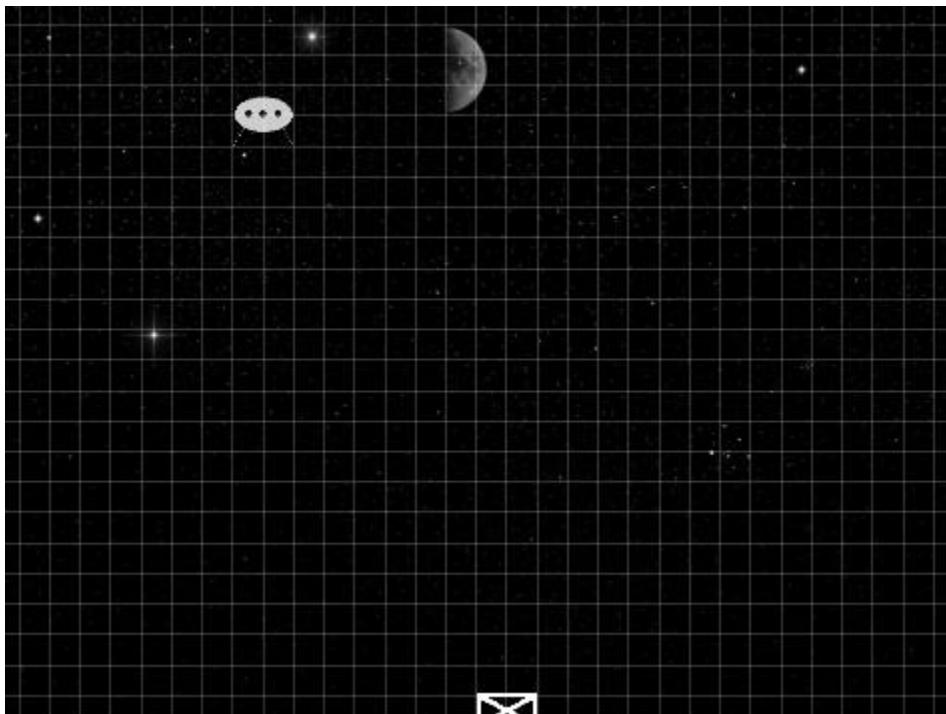
Create ObjBase and connect it to SprBase

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**

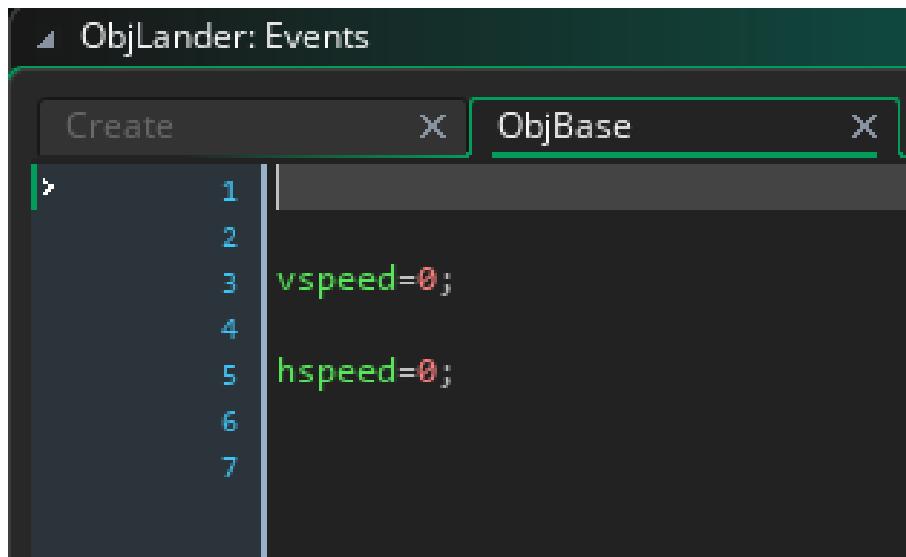
Set the **gravity** to **0.02**

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

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

## Collision with ObjBase

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



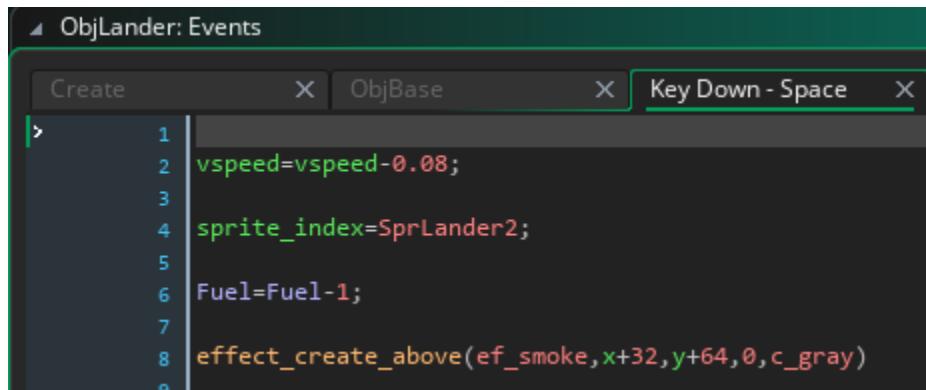
```
ObjLander: Events
  Create
  ObjBase
    vspeed=0;
    hspeed=0;
```

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
  ObjBase
  Key Down - Space
    vspeed=vspeed-0.08;
    sprite_index=SprLander2;
    Fuel=Fuel-1;
    effect_create_above(ef_smoke,x+32,y+64,0,c_gray)
```

## 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
  ObjBase
  *Key Down Left
  *Key Down Right
  *Key Down Left
  *Key Down Right

  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
  ObjBase
  *Key Down Left
  *Key Down Right
  *Key Down Left
  *Key Down Right

  1 | hspeed=hspeed+0.02;
  2 |
```

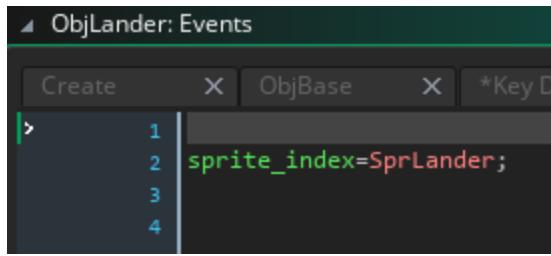
then use **Effect\_create\_above** to put an effect on the opposite side of the lander.

In Outside Room, End the game

```
ObjLander: Events
  Create
  ObjBase
  *Key Up Space
  *Key Up Space
  *Key Up Space

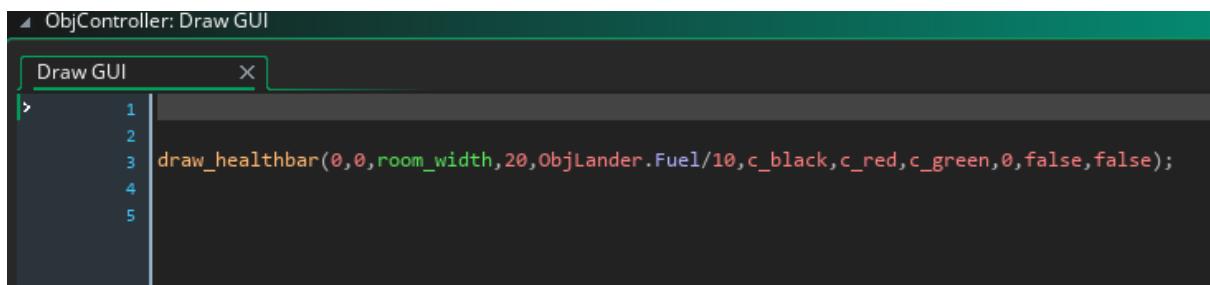
  1 | game_end();
```

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



```
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.



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