

A series of thin, black, overlapping lines forming various geometric shapes like triangles and polygons, scattered across the top and left side of the page.

ROBLOX PROGRAMMING

First Program

RoboCatz

AGENDA

Introduction

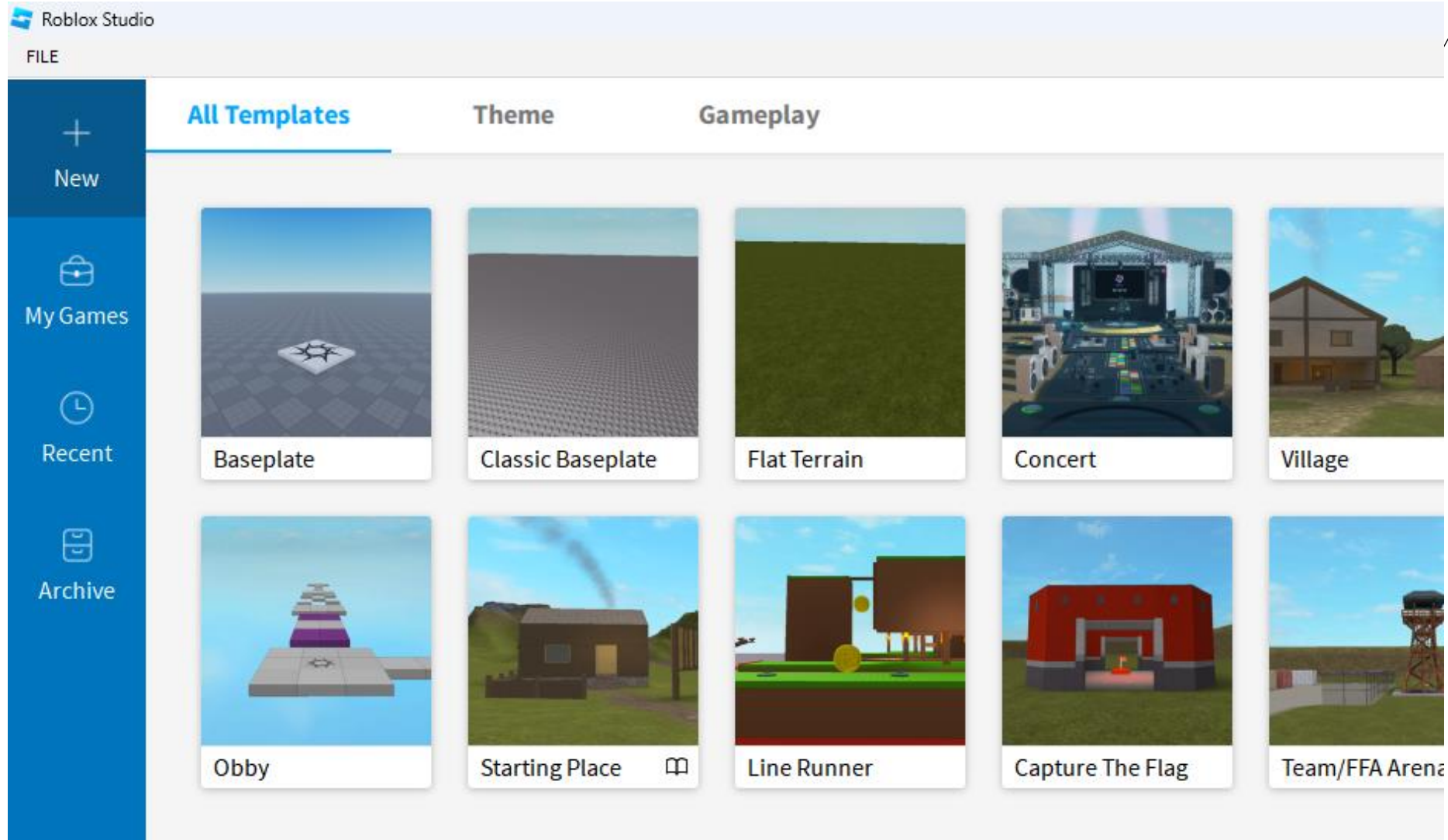
Primary goals

Areas of growth

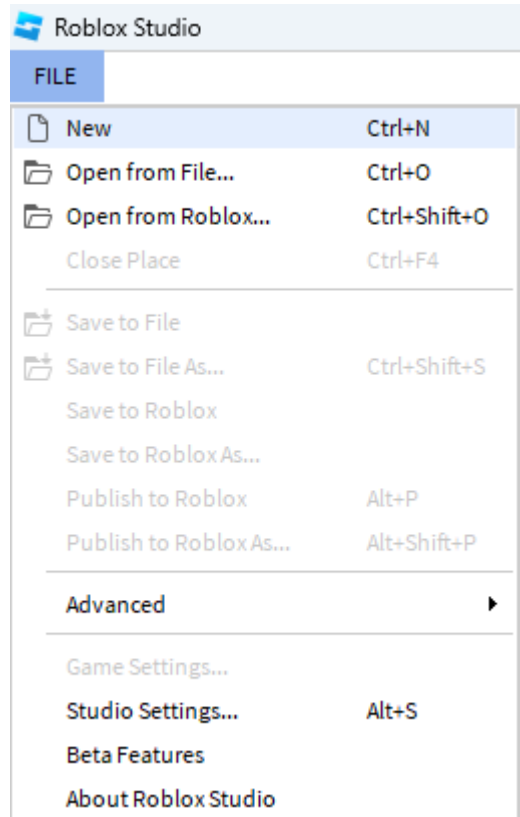
Timeline

Summary

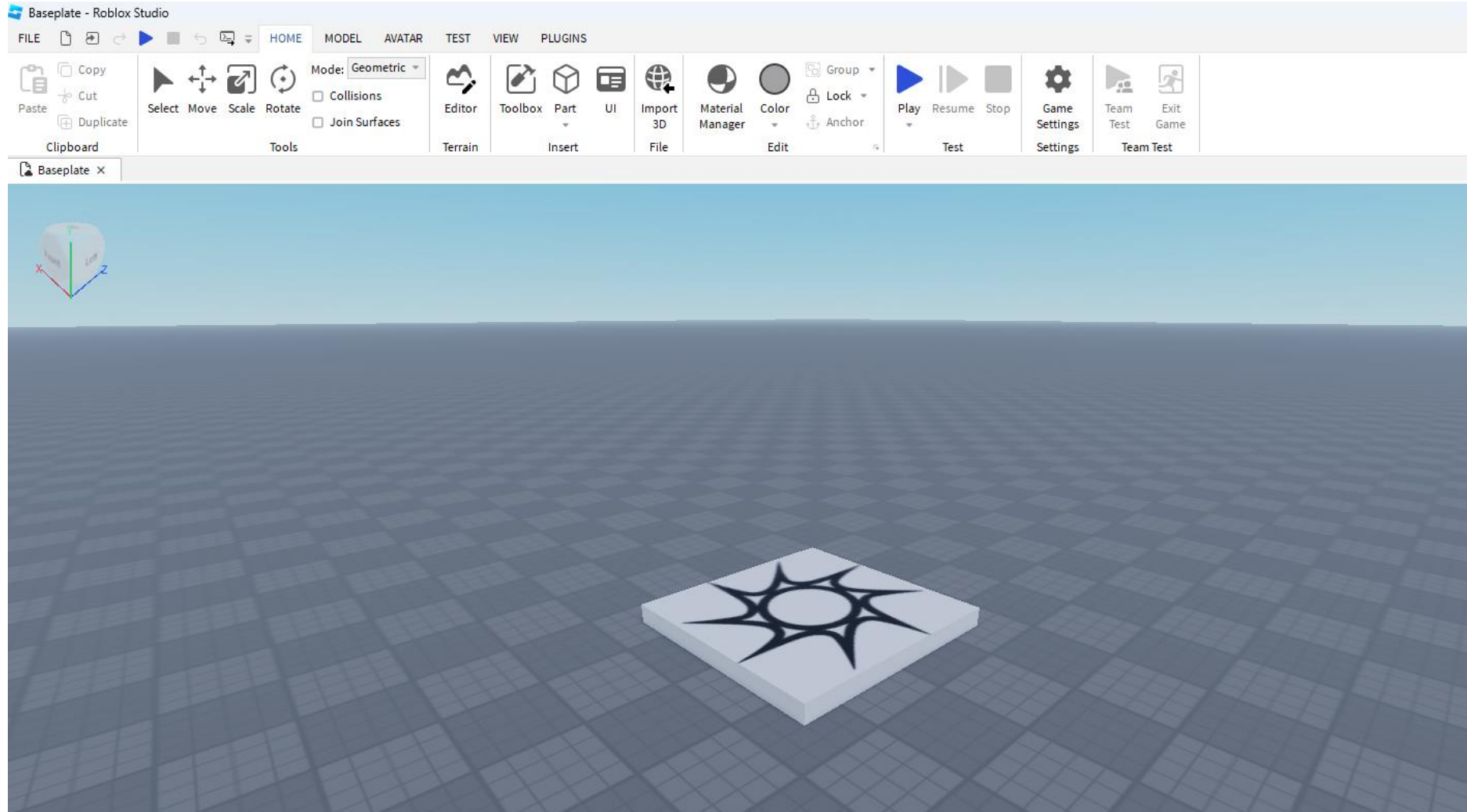
Roblox Studio <https://create.roblox.com>



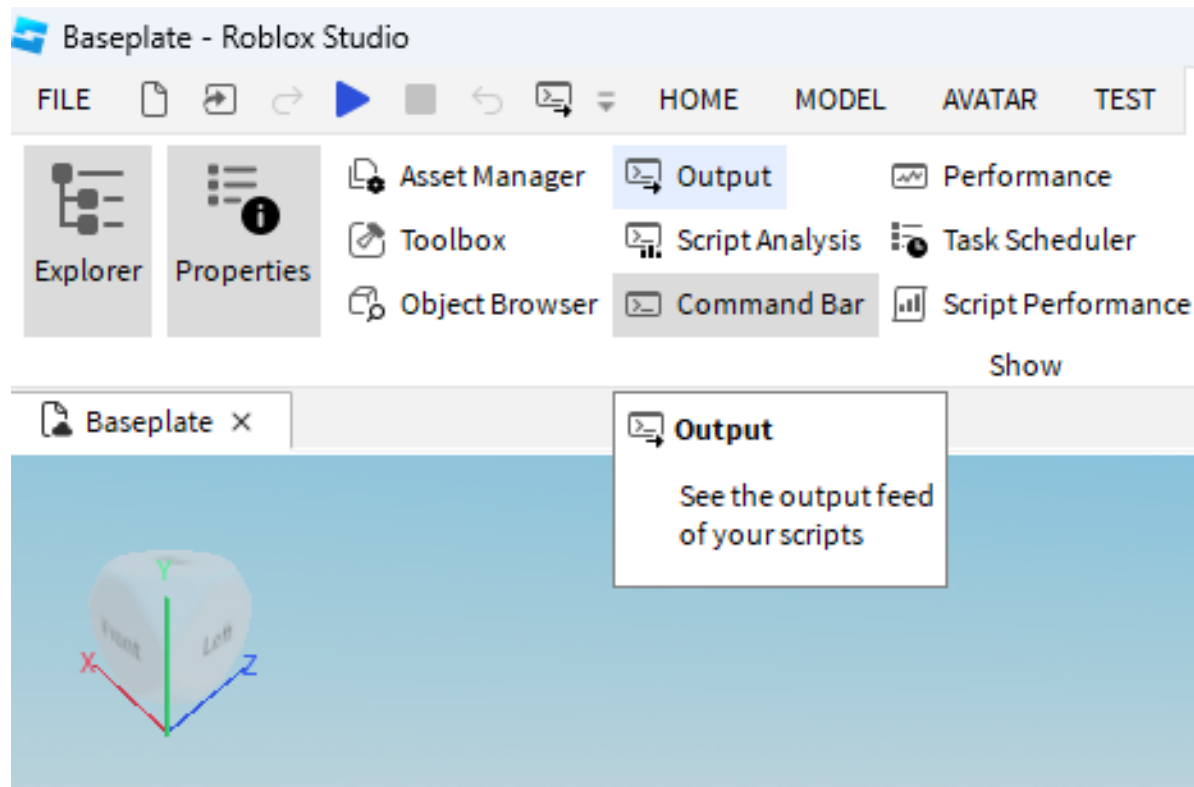
Roblox Studio - File Menu



Roblox Studio - Interface



ROBLOX STUDIO - ACTIVATE THE OUTPUT PANEL

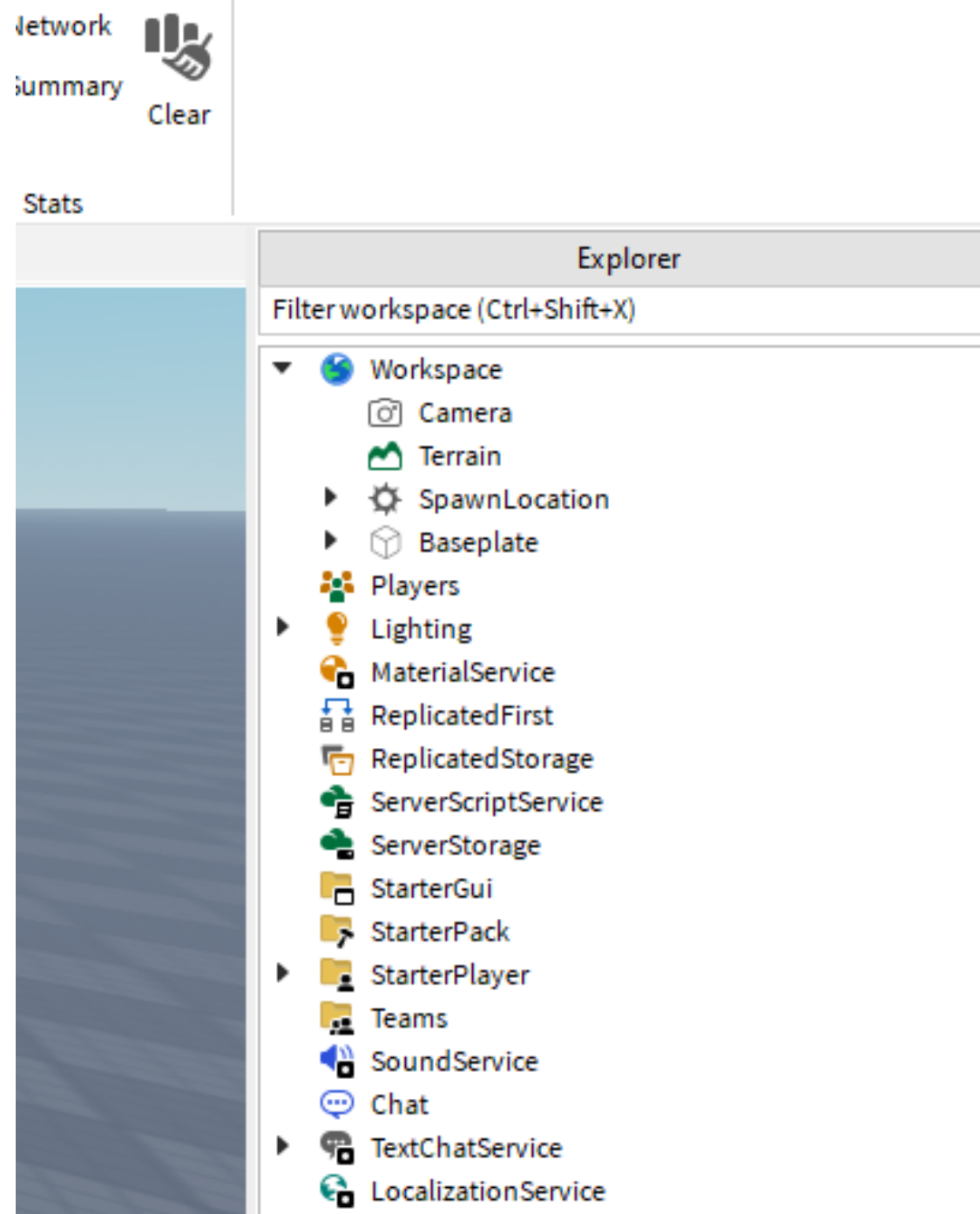


Roblox Studio - Output panel is at the bottom

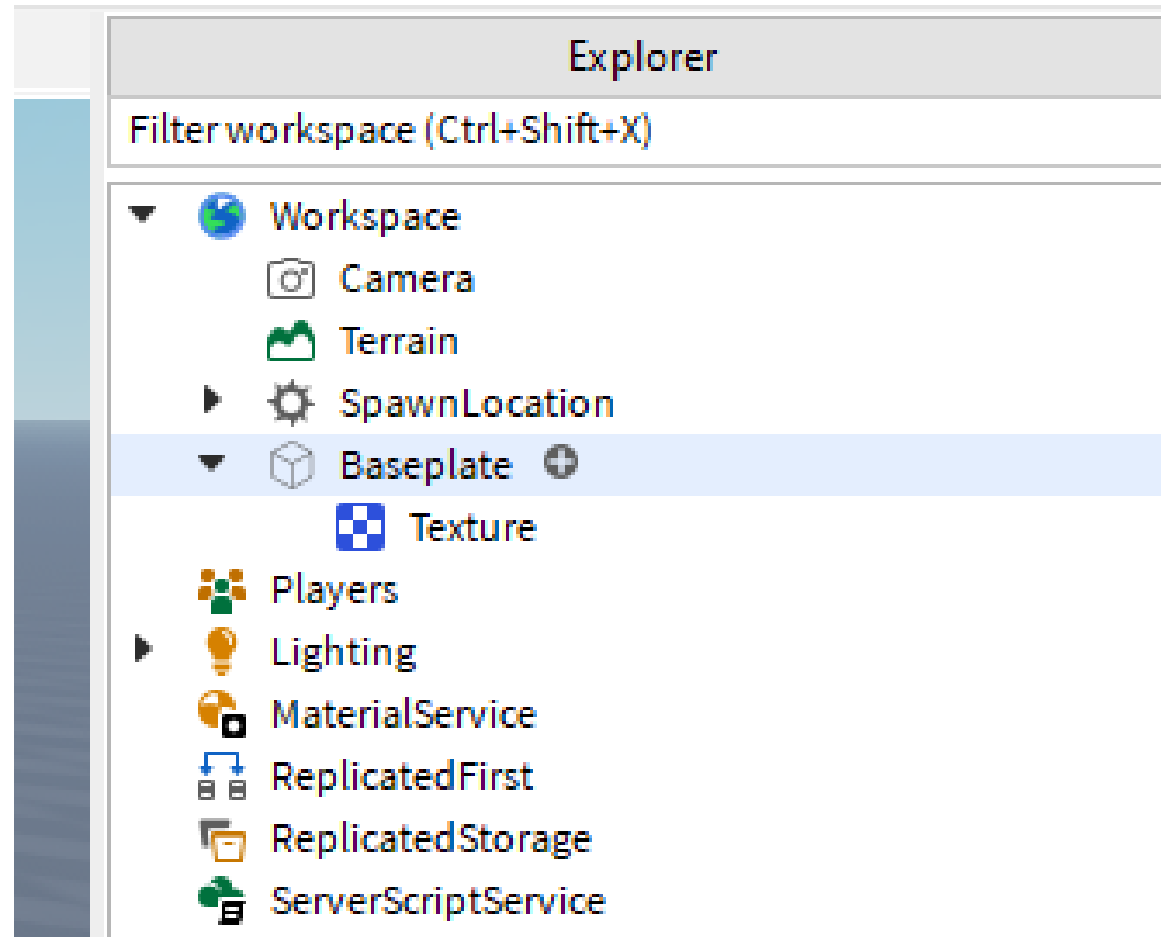


Roblox Studio

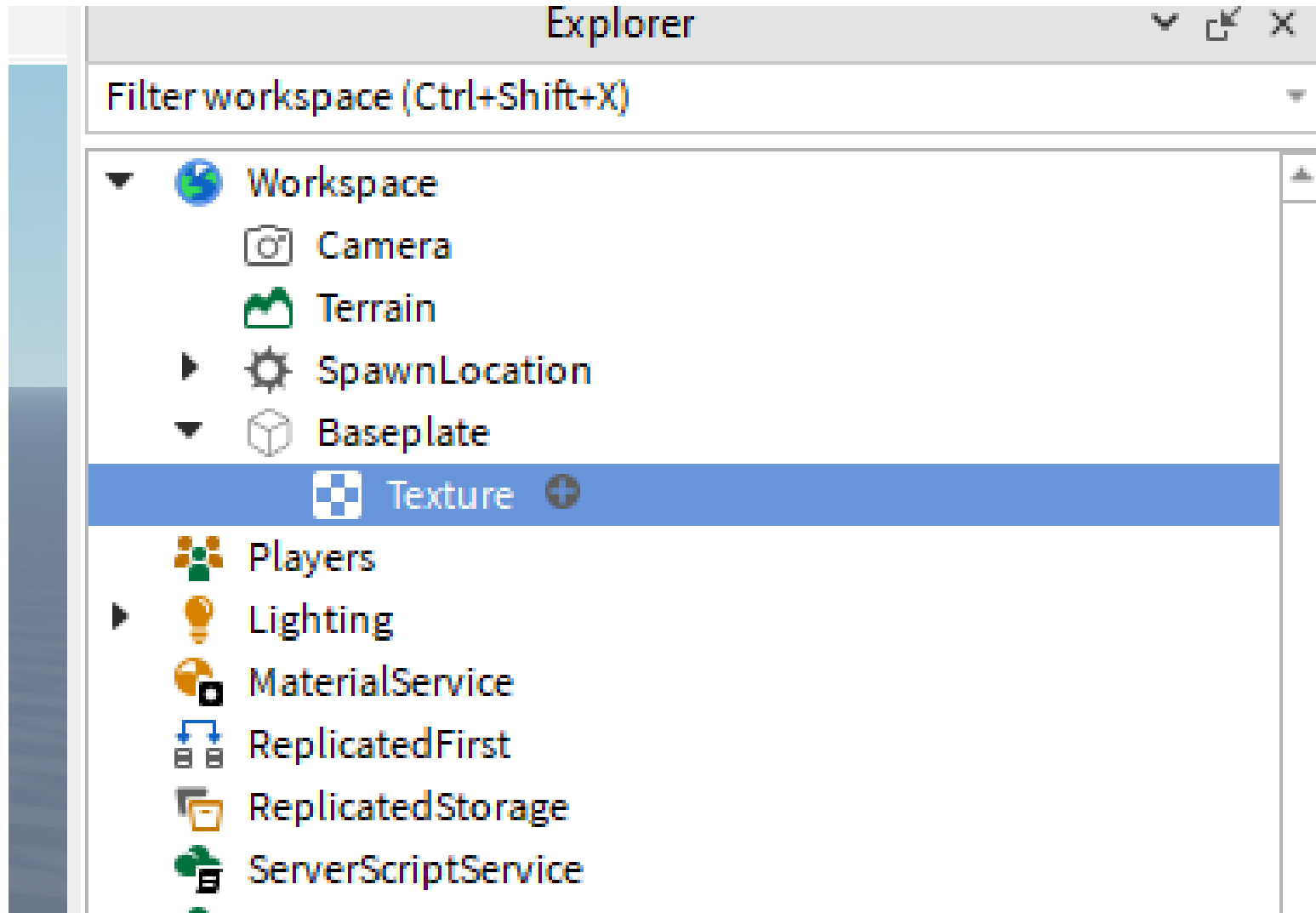
Use explorer
- Workspace



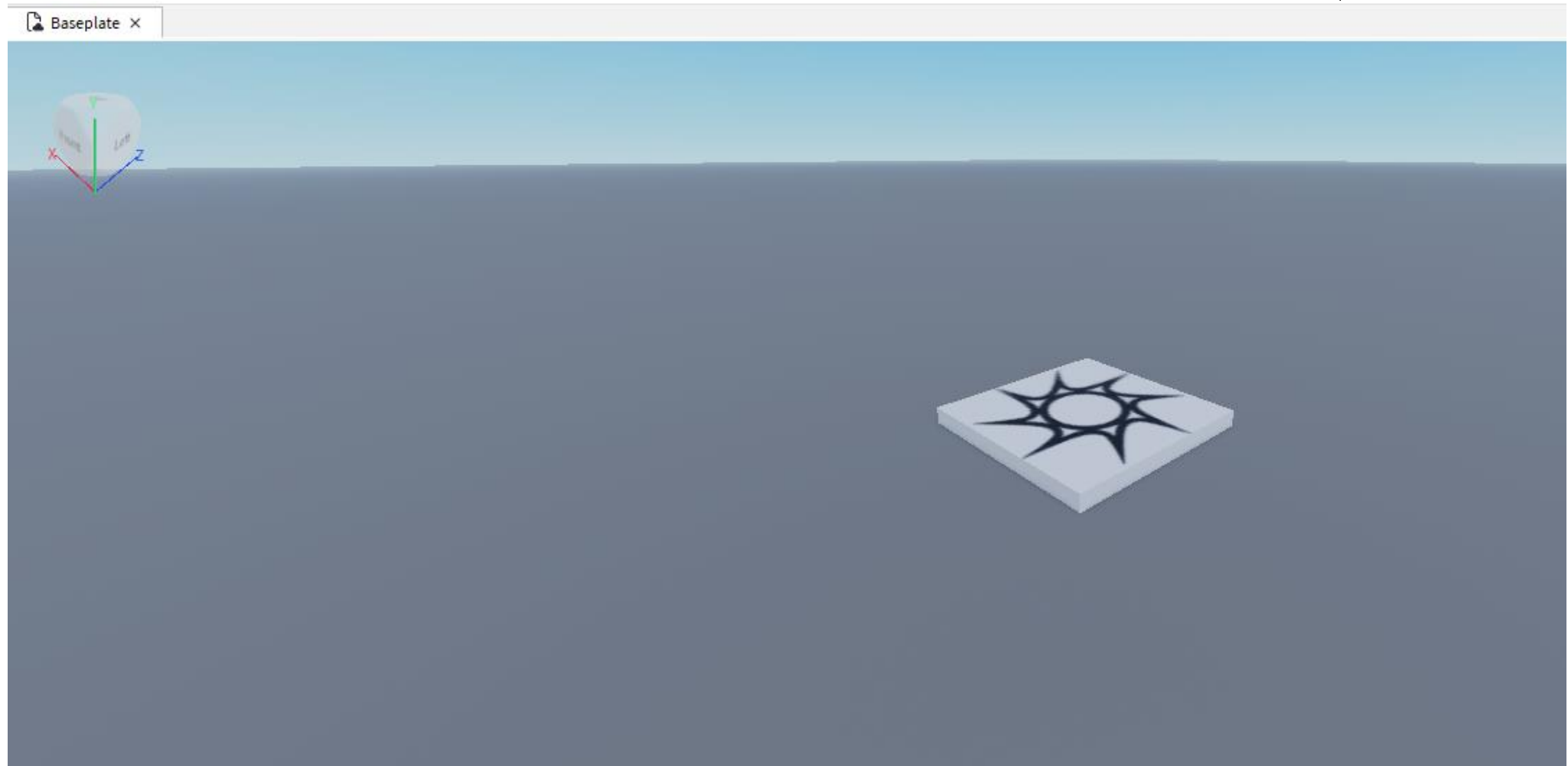
Roblox Studio - Open Baseplate object



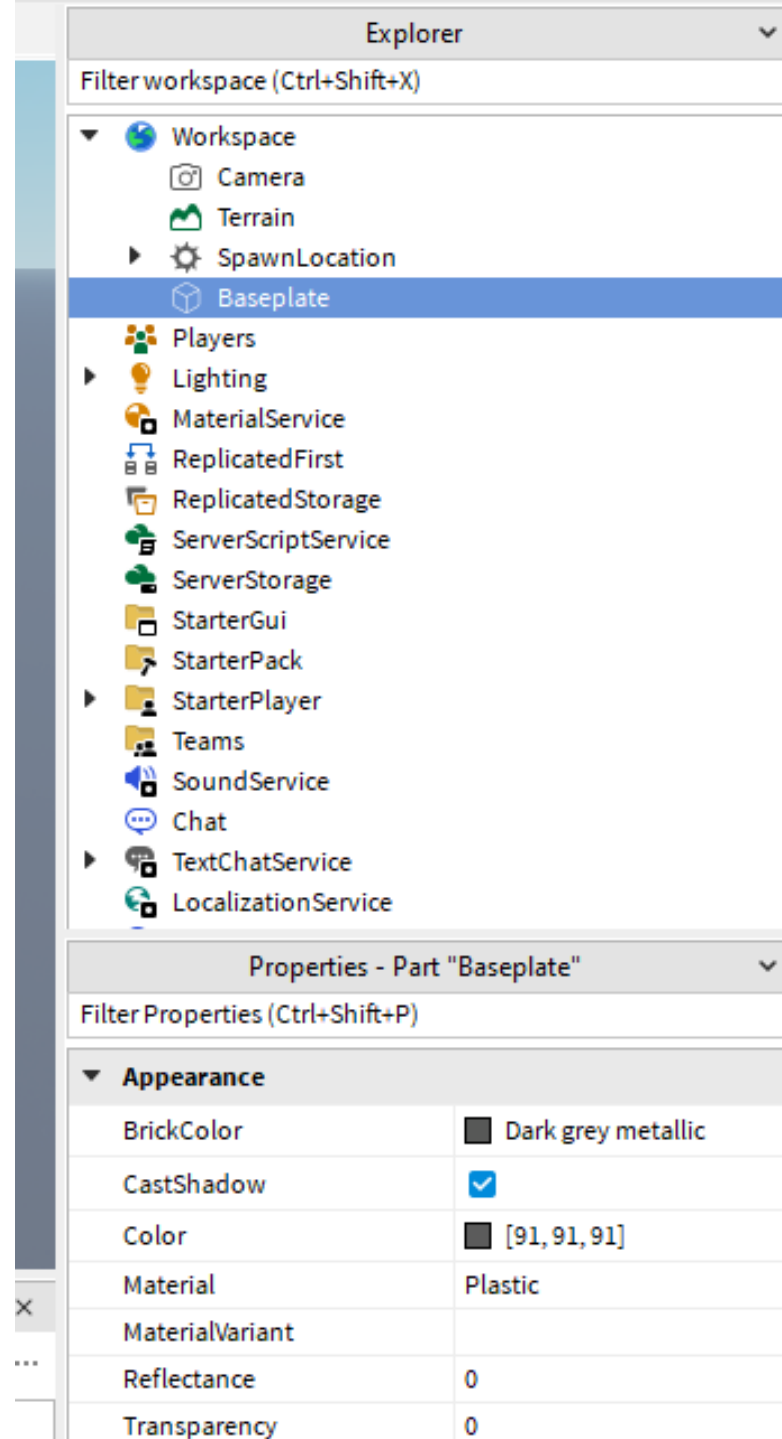
Roblox Studio - Select texture and delete it



Roblox Studio - Baseplate With no texture



Roblox Studio - Select Baseplate



The image shows a screenshot of the Roblox Studio interface. The top panel is the Explorer, which displays a tree view of the workspace. The 'Baseplate' is selected and highlighted in blue. Below the Explorer is the Properties panel, which shows the properties for the selected 'Part "Baseplate"'. The Properties panel is divided into sections, with the 'Appearance' section expanded to show various settings.

Explorer

Filter workspace (Ctrl+Shift+X)

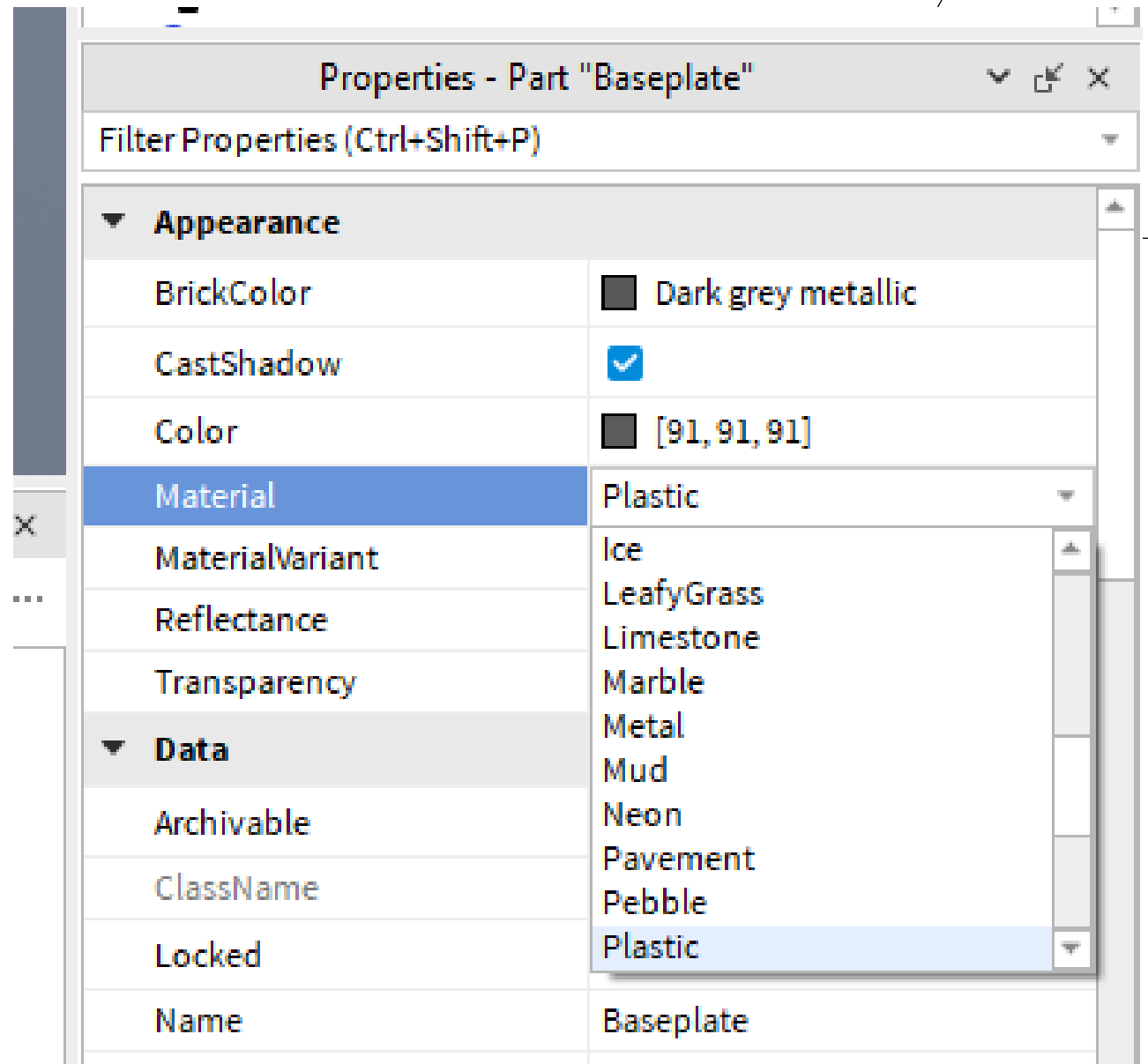
- Workspace
 - Camera
 - Terrain
 - SpawnLocation
 - Baseplate**
 - Players
- Lighting
- MaterialService
- ReplicatedFirst
- ReplicatedStorage
- ServerScriptService
- ServerStorage
- StarterGui
- StarterPack
- StarterPlayer
- Teams
- SoundService
- Chat
- TextChatService
- LocalizationService

Properties - Part "Baseplate"

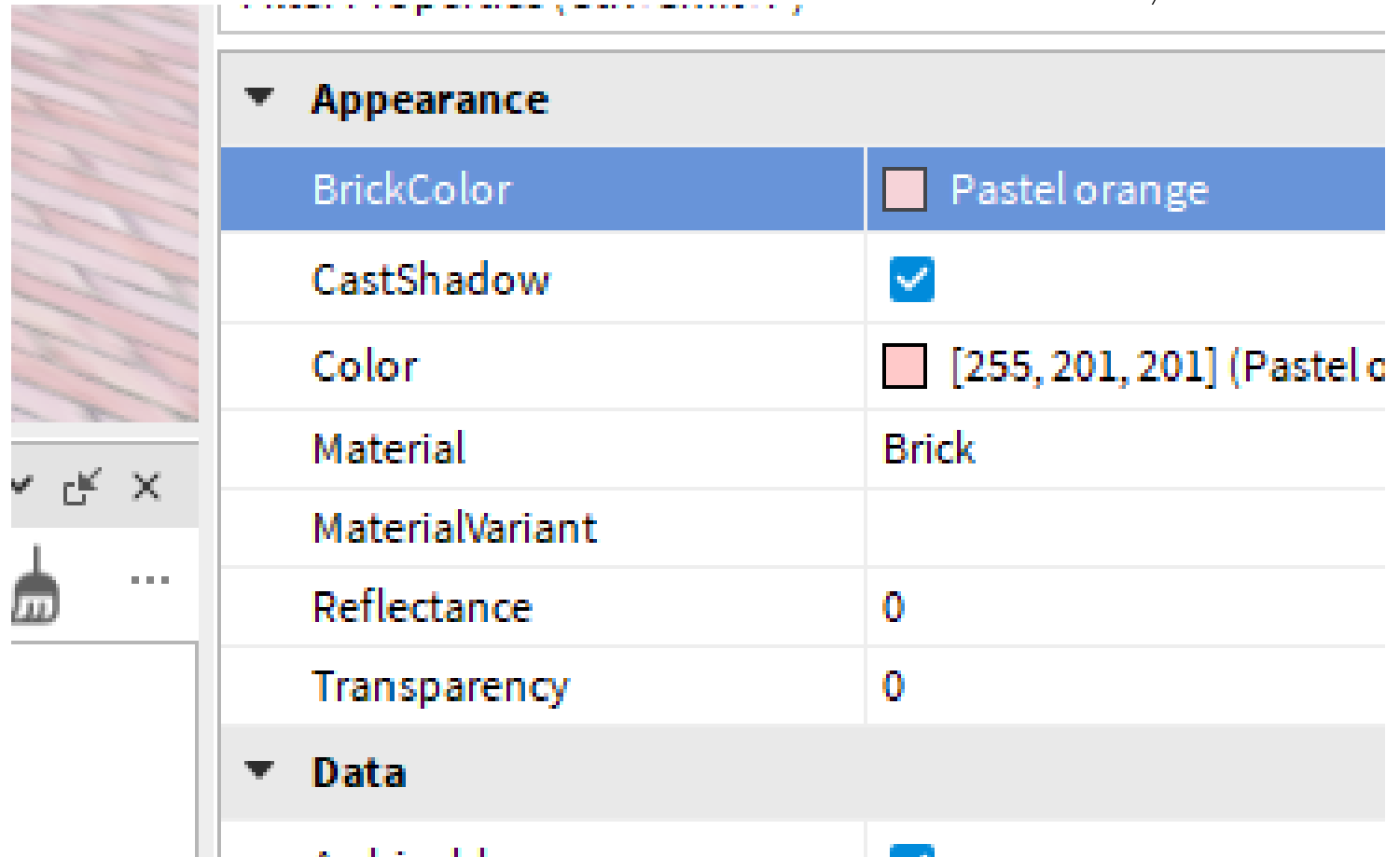
Filter Properties (Ctrl+Shift+P)

Appearance	
BrickColor	Dark grey metallic
CastShadow	<input checked="" type="checkbox"/>
Color	[91, 91, 91]
Material	Plastic
MaterialVariant	
Reflectance	0
Transparency	0

Roblox Studio - Baseplate material



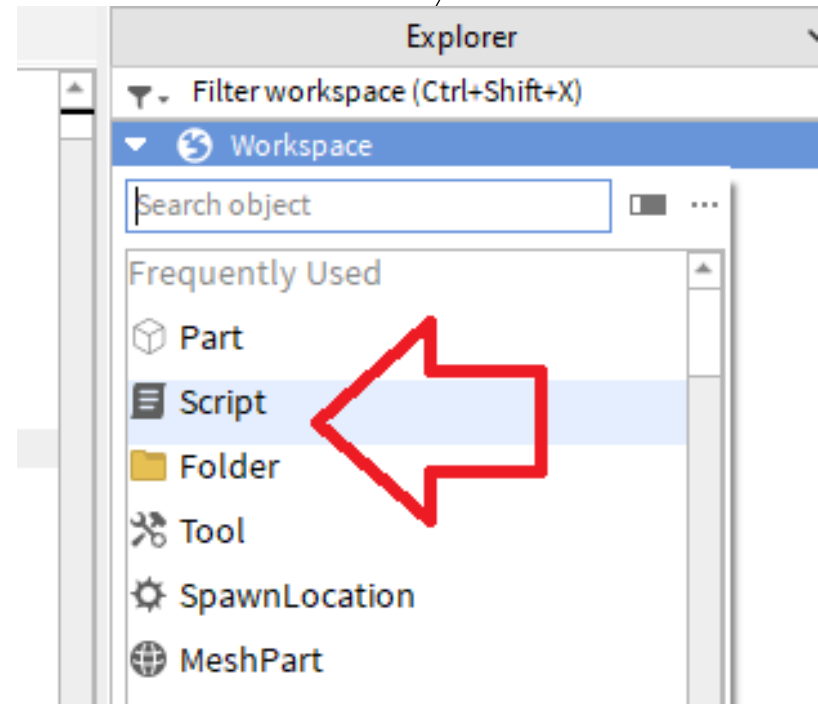
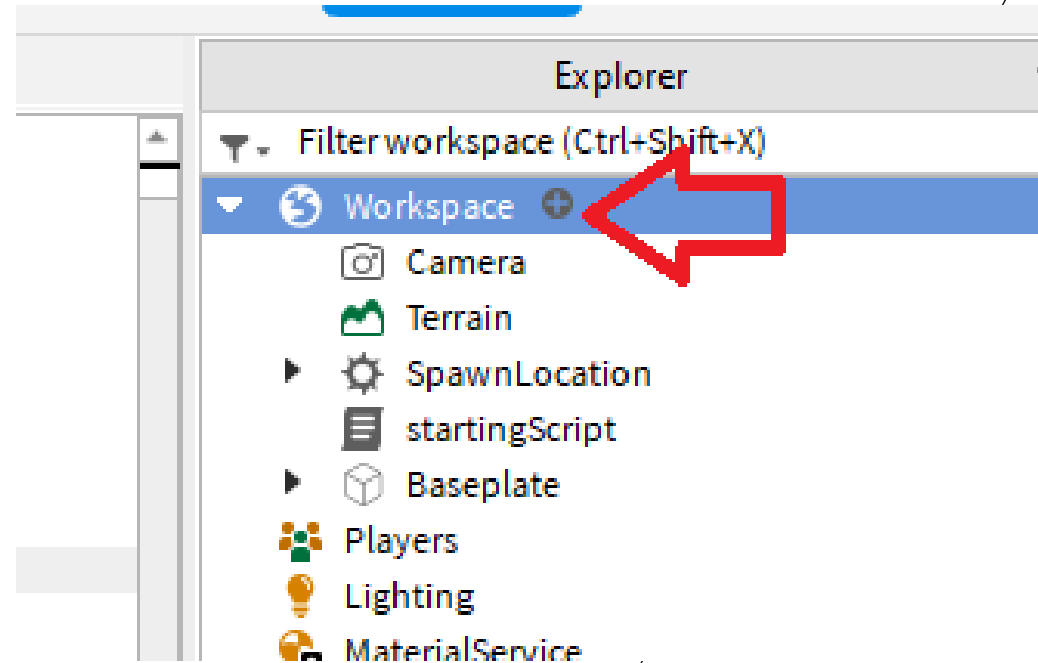
Roblox Studio - Change the material and color



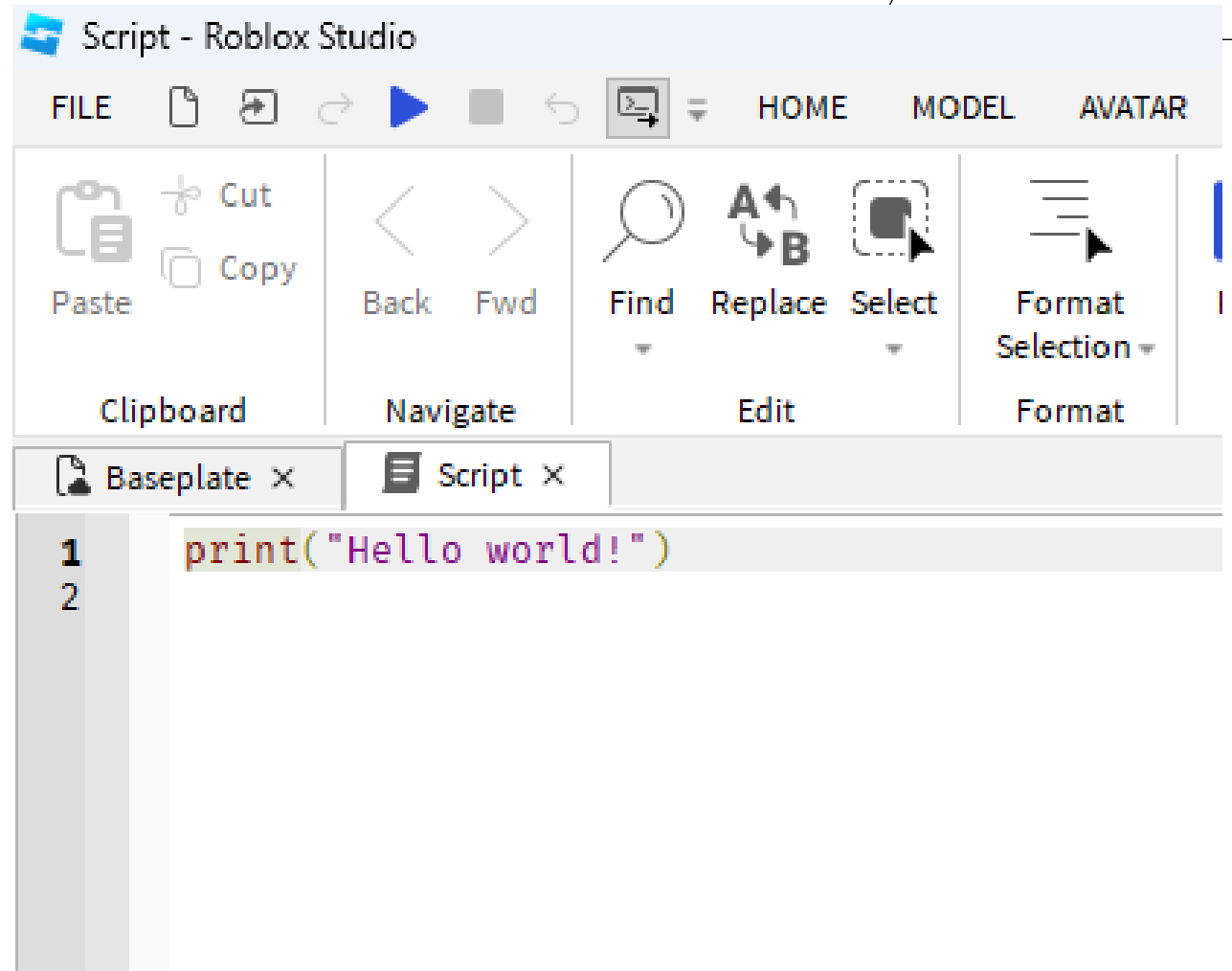
Roblox Studio - Adding a Script to the Workspace

Click + next to
Workspace

Click on "Script"



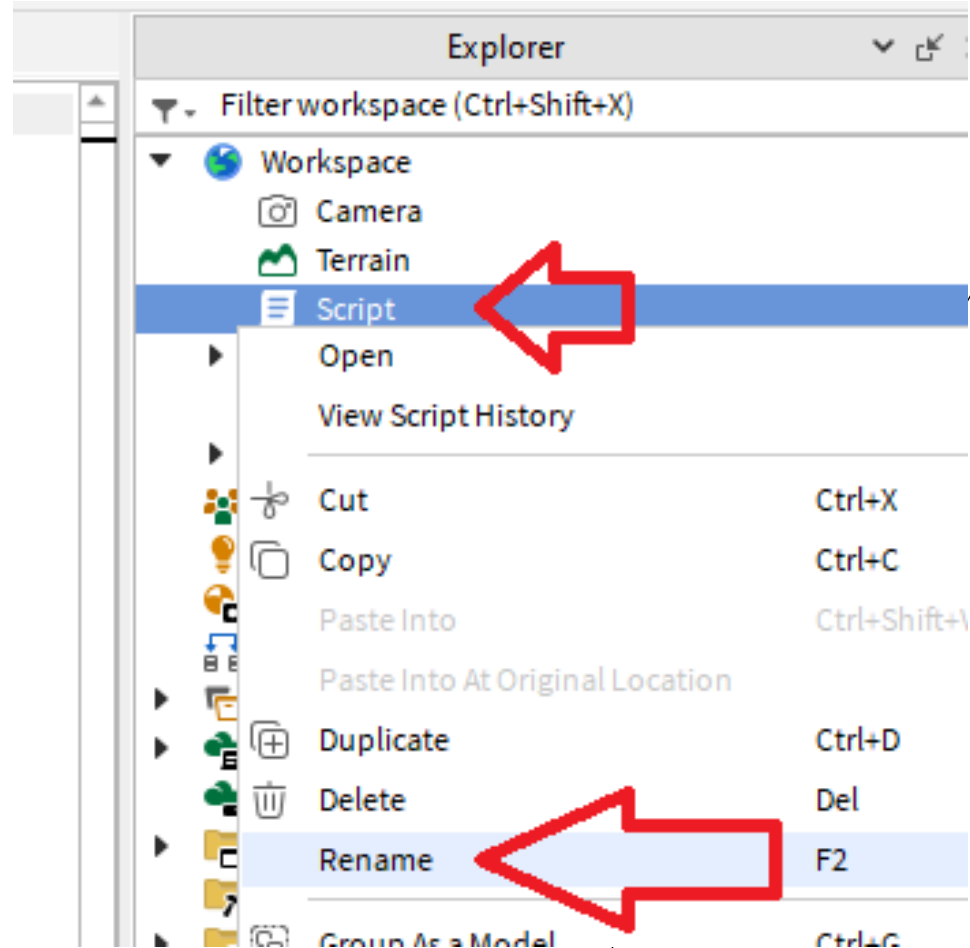
Roblox Studio -
"Hello World"
added automatically
to the script



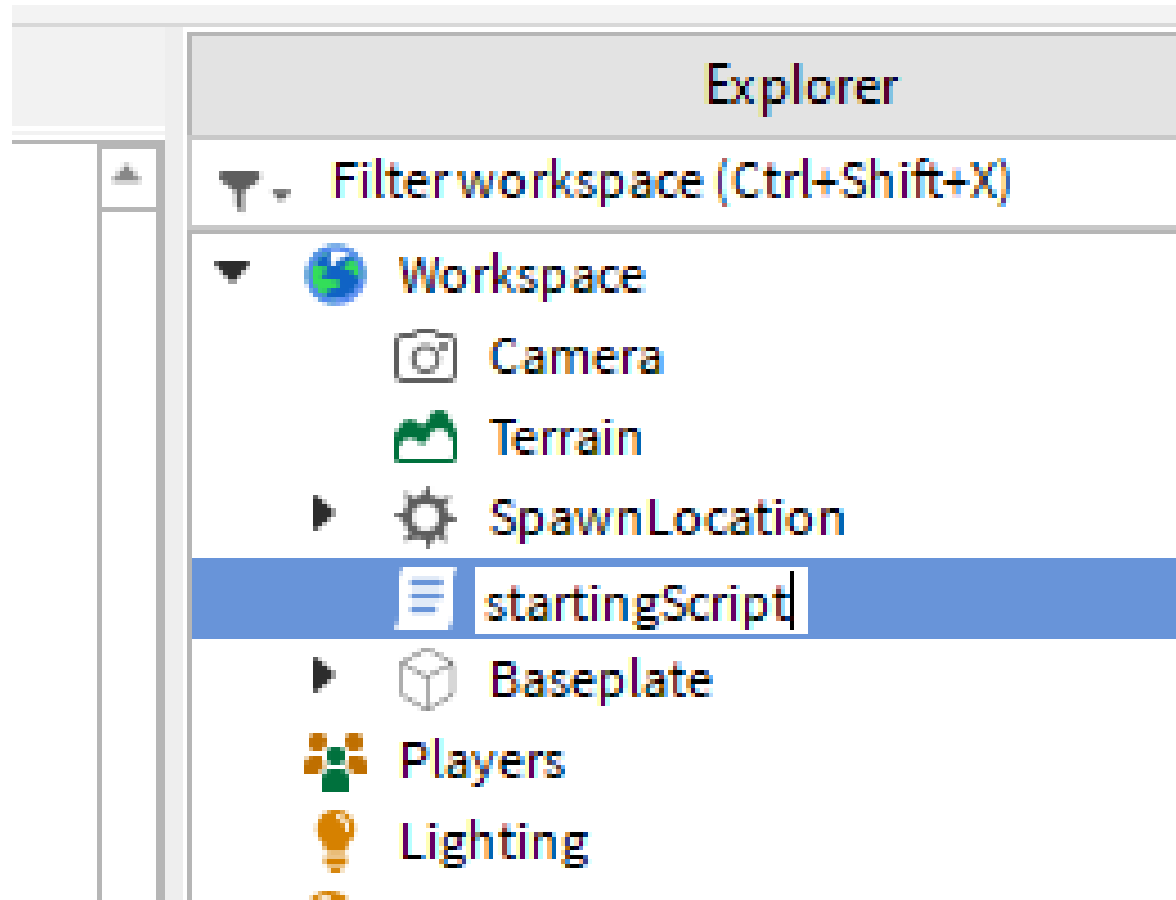
Roblox Studio - Rename the Workspace Script you created

Right-click to access
the properties menu

Then choose:
“Rename”



Roblox Studio - Rename it: *startingScript*



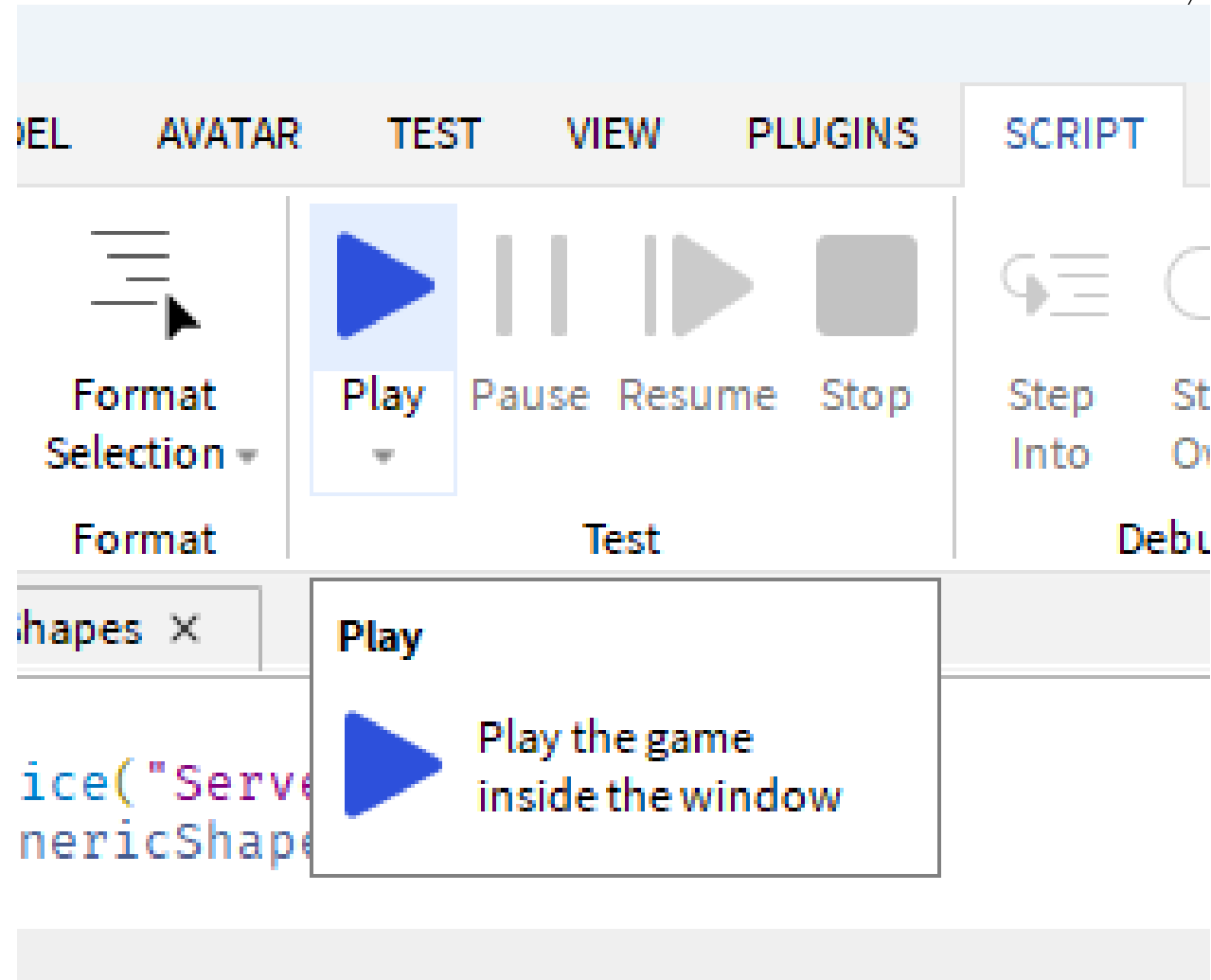
Roblox Studio -
In the *startingScript*
add 7 lines of code

Place1 x

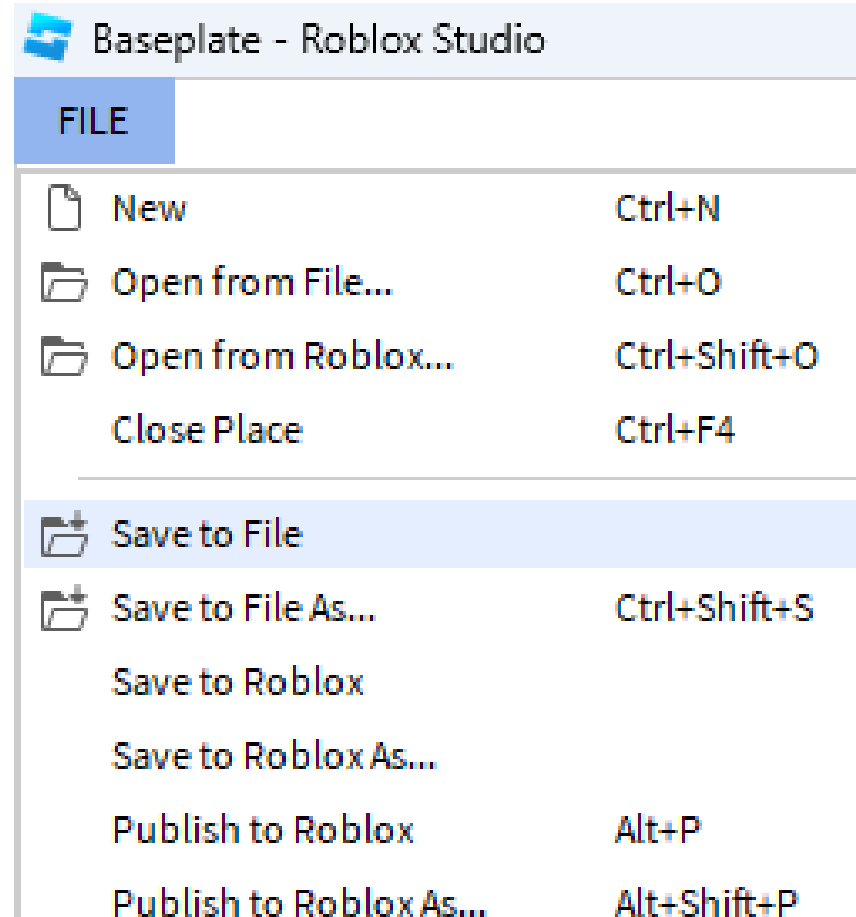
startingScript x

```
1  for count = 0, 10 do
2      local part = Instance.new("Part")
3      part.Shape = Enum.PartType.Ball
4      part.Parent = workspace
5      part.Position = part.Position + Vector3.new(0,2,-10*count-10)
6      part.Size = Vector3.new(3,3,3)
7  end
```

Roblox Studio -
Click on "Play"



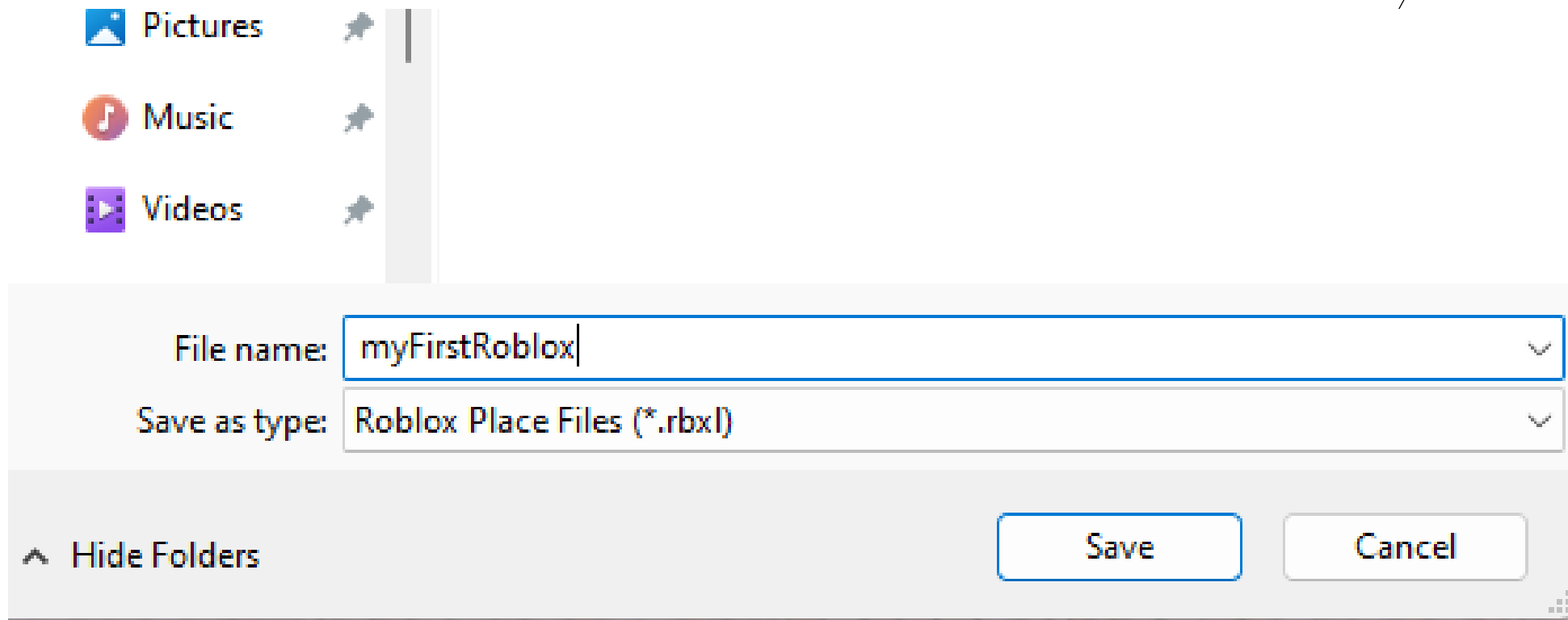
Roblox Studio - Save your program



Save to File

Give it a decent file name

Roblox Studio - I called mine: myFirstRoblox



Roblox Studio -

In the *startingScript*

change the color of the balls

add 1 line of code to existing program

Place1 x

startingScript x

```
1  for count = 0, 10 do
2      local part = Instance.new("Part")
3      part.Shape = Enum.PartType.Ball
4      part.Parent = workspace
5      part.Position = part.Position + Vector3.new(0, 2, -10*count-10)
6      part.Size = Vector3.new(3, 3, 3)
7      part.Color = Color3.new(1, 0.2, 0.8)
8  end
9
10
```

Roblox Studio -

In the *startingScript*

add a variable on line 1

add lines 8 & 9 to create a (x,z) coordinate

```
Placel x  startingScript x
1  local numSpheres = 10
2  for count = 0, numSpheres do
3      local part = Instance.new("Part")
4      part.Shape = Enum.PartType.Ball
5      part.Color = Color3.new(0.2, 0.6, 1)
6      part.Parent = workspace
7      part.Size = Vector3.new(3, 3, 3)
8      local zCoord = math.sin(count/numSpheres*360)*20
9      local xCoord = math.cos(count/numSpheres*360)*20
10     part.Position = part.Position + Vector3.new(xCoord, 2, zCoord)
11 end
12
```


Roblox Studio -

In the *startingScript*

change the value of the variable on line 1

change the last number on line 8

change the color on line 5

```
Placel x  startingScript x
1  local numSpheres = 10
2  for count = 0, numSpheres do
3      local part = Instance.new("Part")
4      part.Shape = Enum.PartType.Ball
5      part.Color = Color3.new(0.2, 0.6, 1)
6      part.Parent = workspace
7      part.Size = Vector3.new(3, 3, 3)
8      local zCoord = math.sin(count/numSpheres*360)*20
9      local xCoord = math.cos(count/numSpheres*360)*20
10     part.Position = part.Position + Vector3.new(xCoord, 2, zCoord)
11 end
12
```

Roblox Studio -

In the *startingScript*

add a top and bottom surface on lines 8 & 9

add a material to line 10

```
Place1 x  startingScript x
1  local numSpheres = 40
2  for count = 0, numSpheres do
3      local part = Instance.new("Part")
4      part.Shape = Enum.PartType.Ball
5      part.Color = Color3.new(0.2, 0.6, 1)
6      part.Parent = workspace
7      part.Size = Vector3.new(3, 3, 3)
8      part.TopSurface = Enum.SurfaceType.Smooth
9      part.BottomSurface = Enum.SurfaceType.Smooth
10     part.Material = Enum.Material.Ice
11     local zCoord = math.sin(count/numSpheres*360)*20
12     local xCoord = math.cos(count/numSpheres*360)*40
13     part.Position = part.Position + Vector3.new(xCoord, 2, zCoord)
14 end
15
```

Roblox Studio -

In the *startingScript*

change the color on line 5 to use expressions

```
Place1 x  startingScript x
1  local numSpheres = 10
2  for count = 0, numSpheres do
3      local part = Instance.new("Part")
4      part.Shape = Enum.PartType.Ball
5      part.Color = Color3.new(0.5, 0.5+math.random(), 0.5+math.random())
6      part.Parent = workspace
7      part.Size = Vector3.new(3, 3, 3)
8      part.TopSurface = Enum.SurfaceType.Smooth
9      part.BottomSurface = Enum.SurfaceType.Smooth
10     part.Material = Enum.Material.Ice
11     local zCoord = math.sin(count/numSpheres*360)*20
12     local xCoord = math.cos(count/numSpheres*360)*20
13     part.Position = part.Position + Vector3.new(xCoord,2,zCoord)
14 end
15
```

Roblox Studio -

In the *startingScript*

change the size on line 7 to use expressions

```
Place1 x startingScript x
1  local numSpheres = 10
2  for count = 0, numSpheres do
3      local part = Instance.new("Part")
4      part.Shape = Enum.PartType.Ball
5      part.Color = Color3.new(0.5, 0.5+math.random(), 0.5+math.random())
6      part.Parent = workspace
7      part.Size = Vector3.new(10, 2 + 20*math.random(), 20)
8      part.TopSurface = Enum.SurfaceType.Smooth
9      part.BottomSurface = Enum.SurfaceType.Smooth
10     part.Material = Enum.Material.Ice
11     local zCoord = math.sin(count/numSpheres*360)*20
12     local xCoord = math.cos(count/numSpheres*360)*20
13     part.Position = part.Position + Vector3.new(xCoord, 2, zCoord)
14 end
15
```

Roblox Studio -

In the *startingScript*

change the partType on line 4 to **.Block**

```
1  local numSpheres = 10
2  for count = 0, numSpheres do
3      local part = Instance.new("Part")
4      part.Shape = Enum.PartType.Block
5      part.Color = Color3.new(0.5, 0.5+math.random(), 0.5+math.random())
6      part.Parent = workspace
7      part.Size = Vector3.new(10, 2 + 20*math.random(), 20)
8      part.TopSurface = Enum.SurfaceType.Smooth
9      part.BottomSurface = Enum.SurfaceType.Smooth
10     part.Material = Enum.Material.Ice
11     local zCoord = math.sin(count/numSpheres*360)*20
12     local xCoord = math.cos(count/numSpheres*360)*20
13     part.Position = part.Position + Vector3.new(xCoord, 2, zCoord)
14 end
15
```

Roblox Studio -

In the *startingScript*

add time of day after the end of the **for** loop

```
1  local numSpheres = 10
2  for count = 0, numSpheres do
3      local part = Instance.new("Part")
4      part.Shape = Enum.PartType.Block
5      part.Color = Color3.new(0.5, 0.5+math.random(), 0.5+math.random())
6      part.Parent = workspace
7      part.Size = Vector3.new(10, 2 + 20*math.random(), 20)
8      part.TopSurface = Enum.SurfaceType.Smooth
9      part.BottomSurface = Enum.SurfaceType.Smooth
10     part.Material = Enum.Material.Ice
11     local zCoord = math.sin(count/numSpheres*360)*20
12     local xCoord = math.cos(count/numSpheres*360)*20
13     part.Position = part.Position + Vector3.new(xCoord, 2, zCoord)
14 end
15 game.Lighting.TimeOfDay = "1:30"
16
```