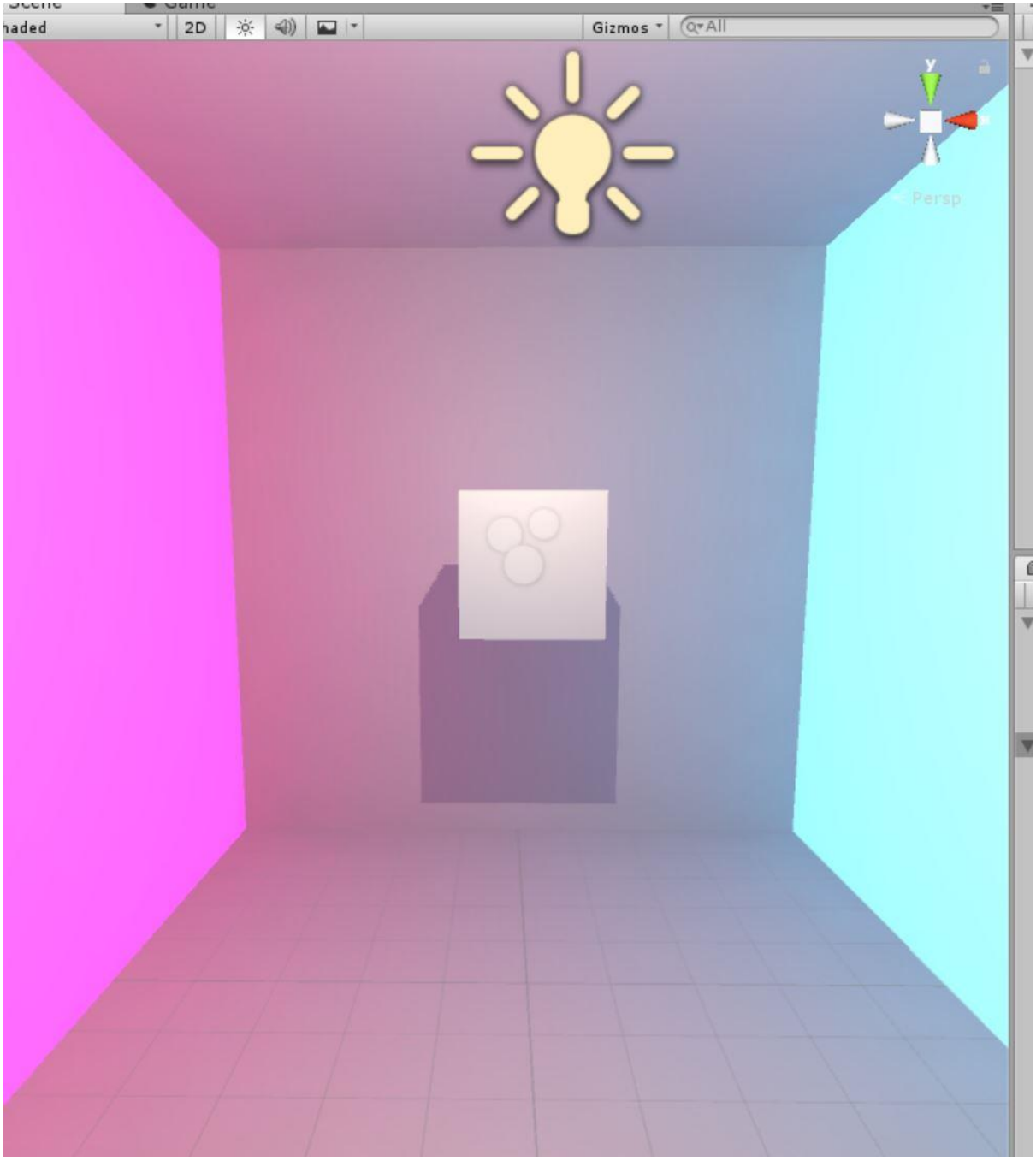
Lab02 Creative Coding in Unity

Sketch ▸ Start ()

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class Sketch : MonoBehaviour {

    public GameObject myPrefab;

    void Start () {

        int totalCubes = 30;

        float totalDistance = 2.9f;

        for ( int i = 0; i < totalCubes; i++)
        {
            float perc = i / (float)totalCubes;
            float sin = Mathf.Sin(perc * Mathf.PI/2);

            float x = 1.8f + sin * totalDistance;
            float y = 5.0f;
            float z = 0.0f;

            var newCube = (GameObject)Instantiate(myPrefab, new Vector3(x, y, z), Quaternion.identity);

            newCube.GetComponent<myCubeScript>().SetSize(.45f * (1.0f - perc));
            newCube.GetComponent<myCubeScript>().rotateSpeed = .2f + perc * 4.0f;
        }

    }

    void Update () {

    }
}
```

```
using UnityEngine;

public class myCubeScript : MonoBehaviour {

    public float rotateSpeed = 1.0f;
    public Vector3 spinSpeed = Vector3.zero;
    public Vector3 spinAxis = new Vector3 (0, 1, 0);

    void Start () {
        spinSpeed = new Vector3(Random.value, Random.value, Random.value);
        spinAxis = Vector3.up;
        spinAxis.x = (Random.value - Random.value) * .1f;
    }

    public void SetSize(float size)
    {
        this.transform.localScale = new Vector3(size, size, size);
    }

    void Update () {
        this.transform.Rotate(spinSpeed);
        this.transform.RotateAround (Vector3.zero, spinAxis, rotateSpeed);
    }
}
```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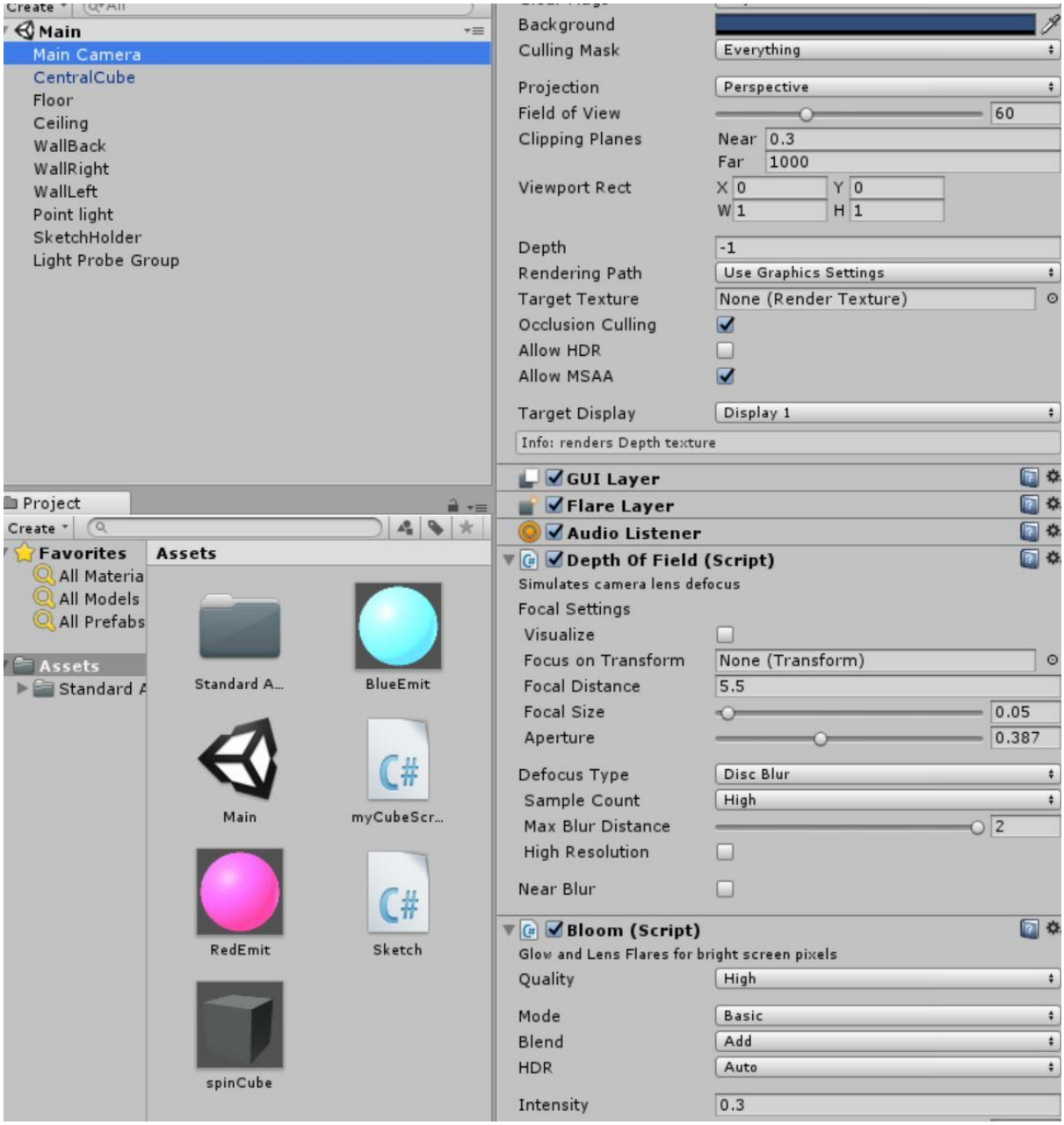
Create
Main
Main Camera
CentralCube
Floor
Ceiling
WallBack
WallRight
WallLeft
Point light
SketchHolder
Light Probe Group
Project
Create
Favorites
All Materia
All Models
All Prefabs
Assets
Standard A
Assets
Standard A...
BlueEmit
Main
myCubeScr...
RedEmit
Sketch
spinCube
Background
Culling Mask
Everything
Projection
Perspective
Field of View
60
Clipping Planes
Near 0.3
Far 1000
Viewport Rect
X 0
Y 0
W 1
H 1
Depth
-1
Rendering Path
Use Graphics Settings
Target Texture
None (Render Texture)
Occlusion Culling
Allow HDR
Allow MSAA
Target Display
Display 1
Info: renders Depth texture
GUI Layer
Flare Layer
Audio Listener
Depth Of Field (Script)
Simulates camera lens defocus
Focal Settings
Visualize
Focus on Transform
None (Transform)
Focal Distance
5.5
Focal Size
0.05
Aperture
0.387
Defocus Type
Disc Blur
Sample Count
High
Max Blur Distance
2
High Resolution
Near Blur
Bloom (Script)
Glow and Lens Flares for bright screen pixels
Quality
High
Mode
Basic
Blend
Add
HDR
Auto
Intensity
0.3