**ACTIVITY PERTEMUAN 5**

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**KELAS : 3IA11**

**MATERI: Logika Game**

**MATA PRAKTIKUM : GRAFIK KOMPUTER 2**

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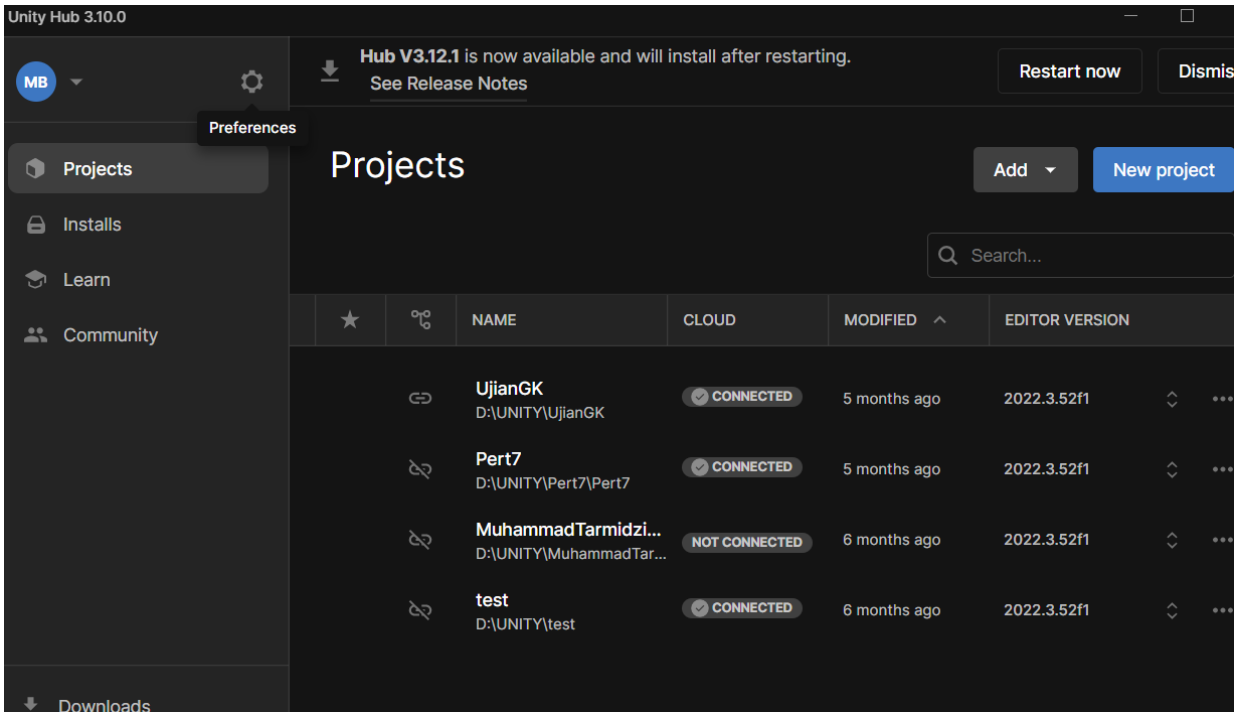
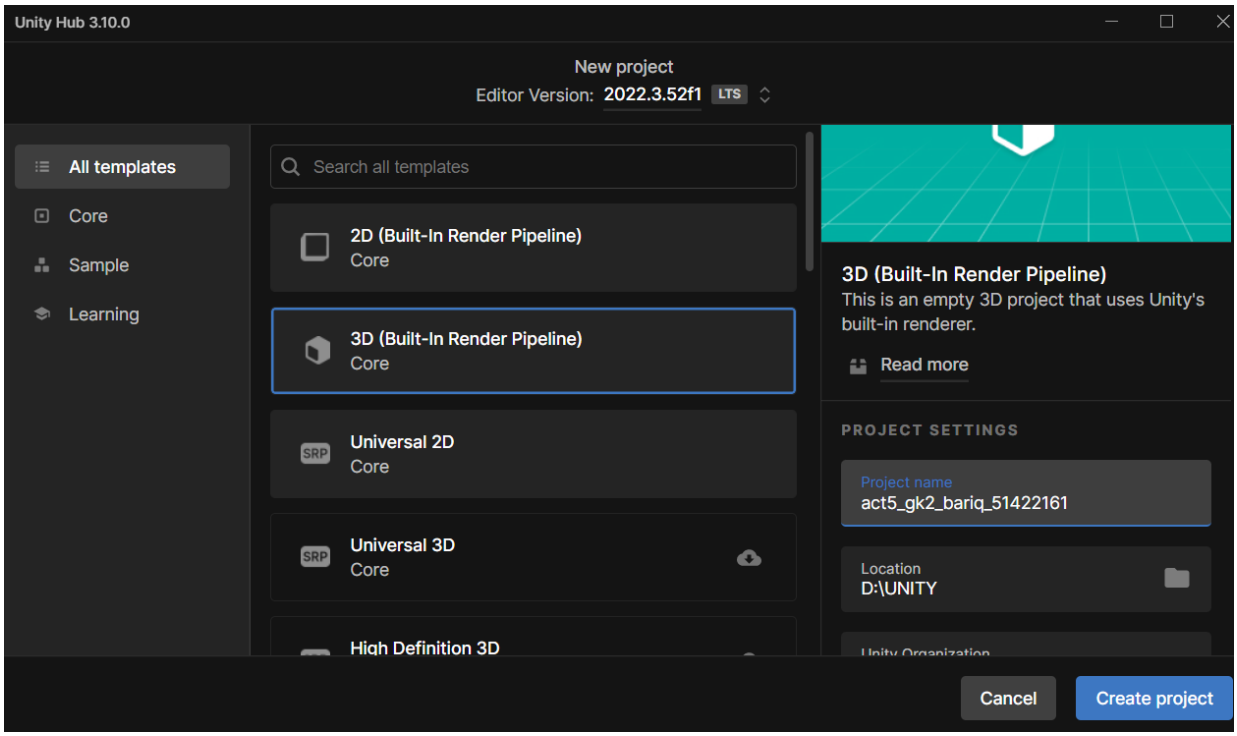
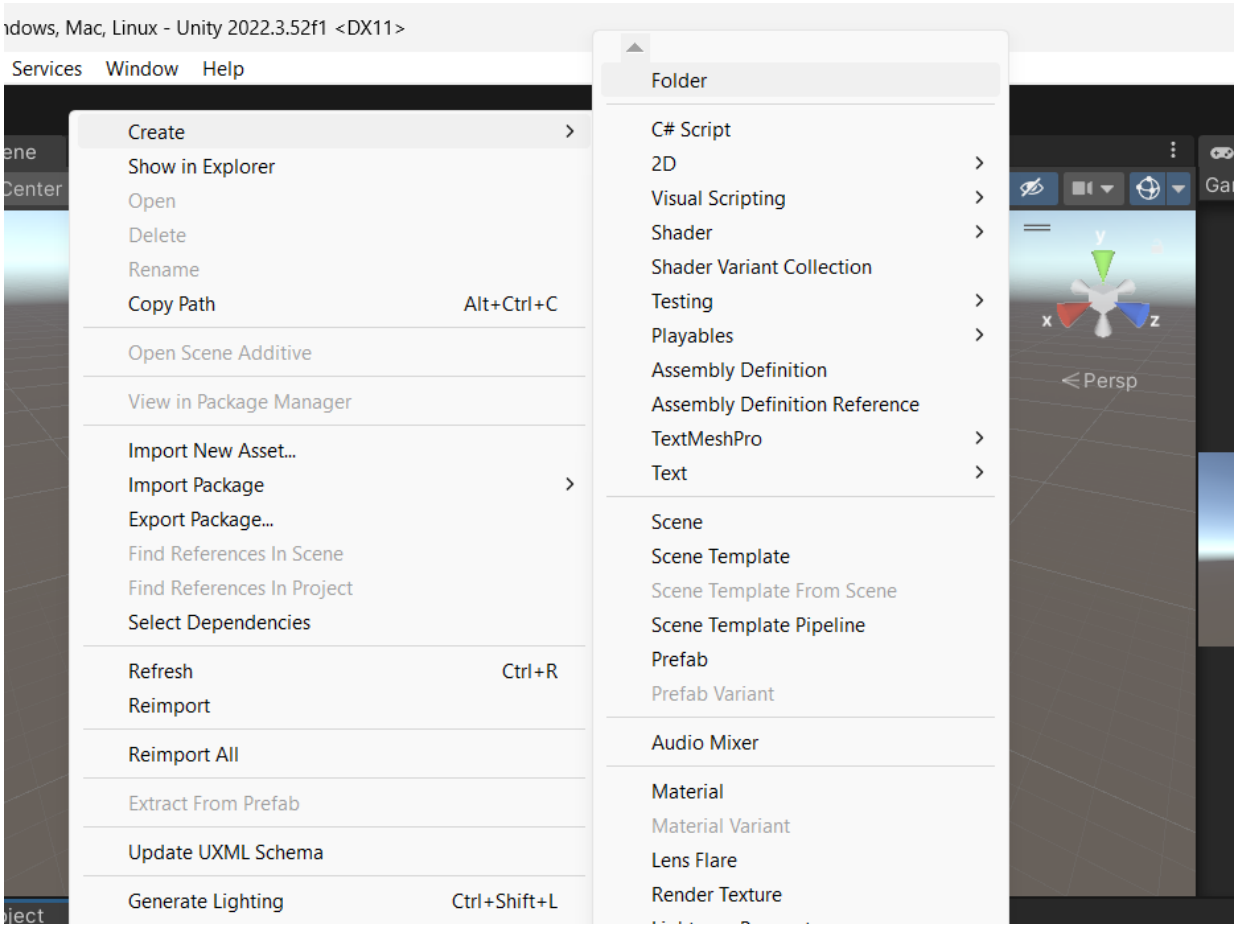
NEW PROJECT



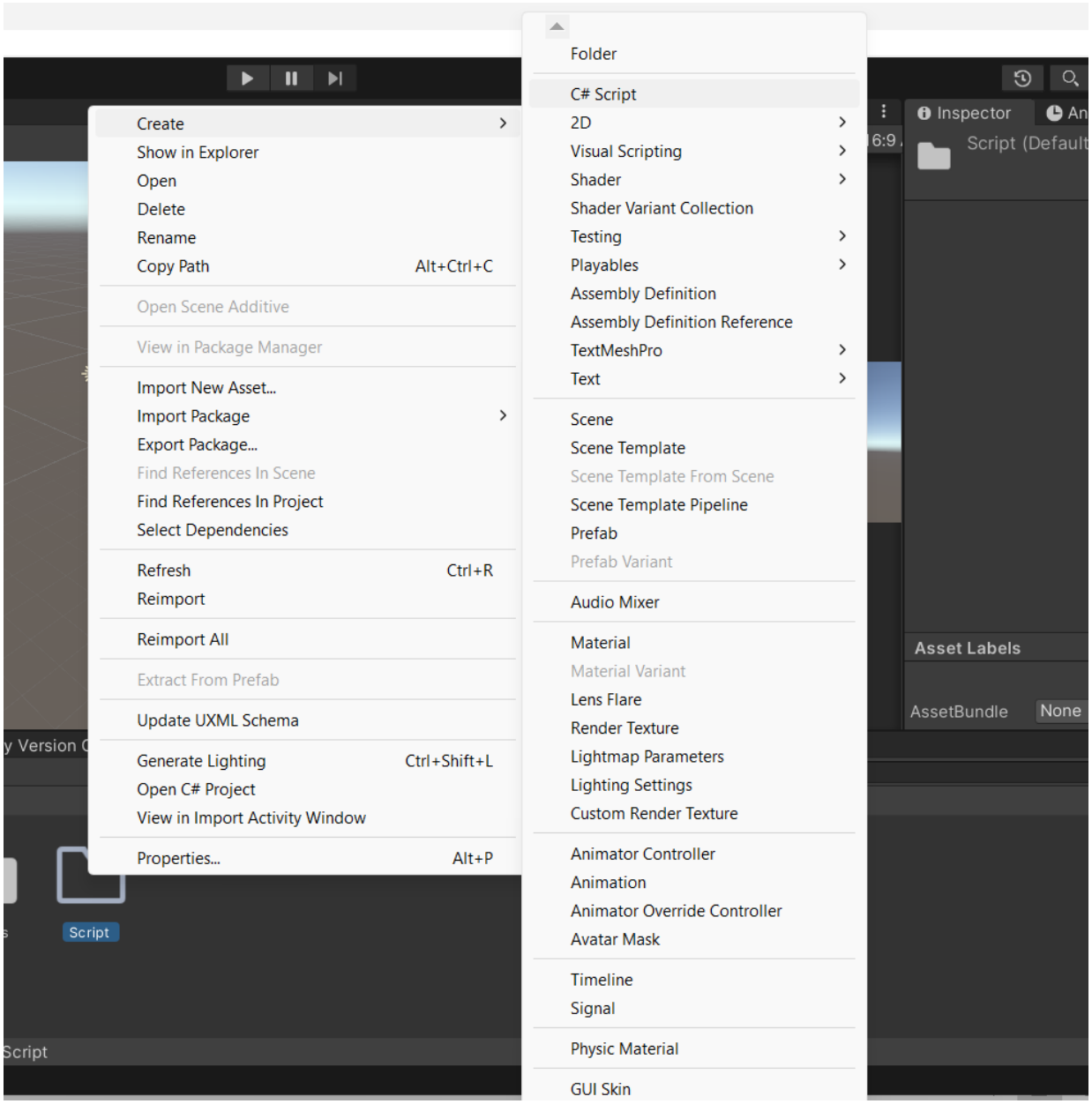
3D(built-in render Pipelinie) -> berikan nama project -> create project



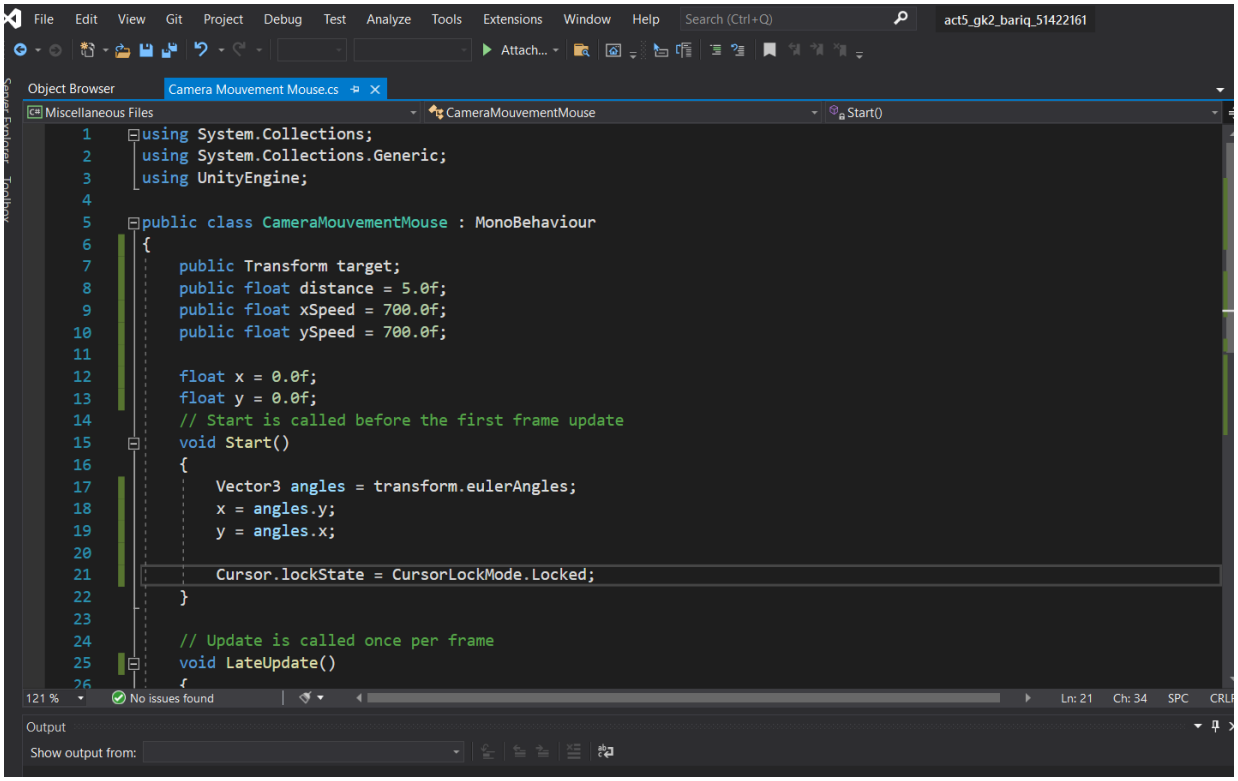

Klik kanan pada asset -> Create -> Folder -> kasih nama Scripting

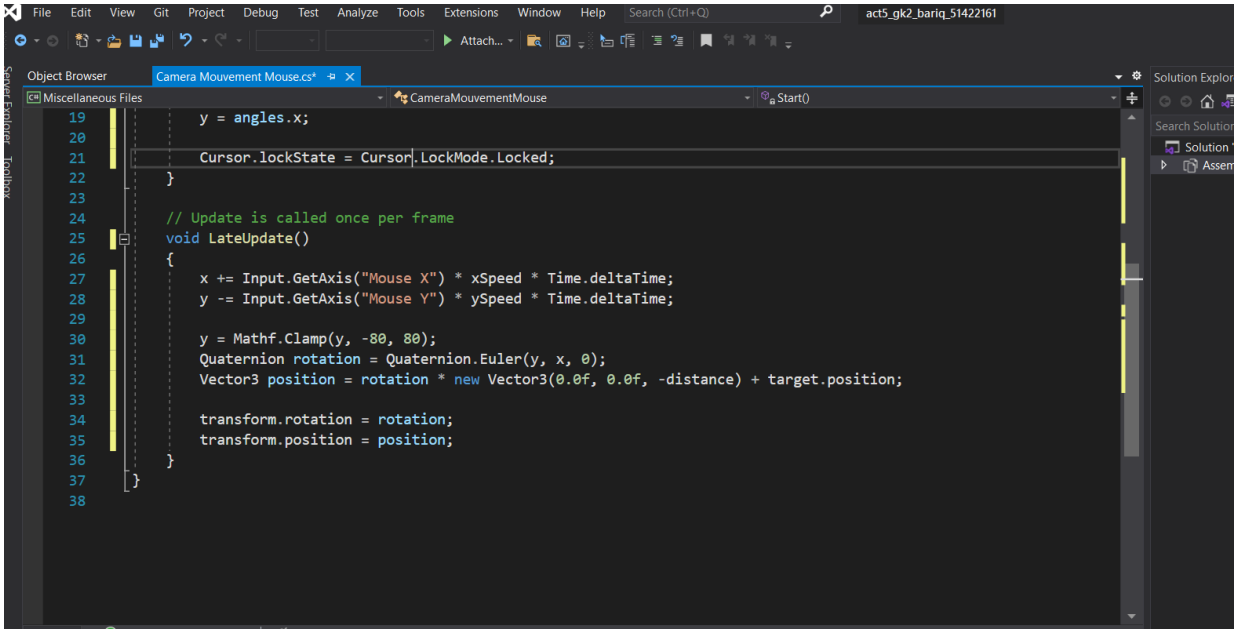


Pilih create -> C# Script - > kasih nama file Camera Mouvement Mouse

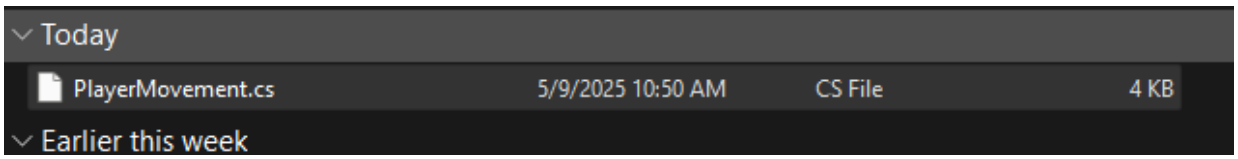



Ketik kode berikut dan jangan lupa disave

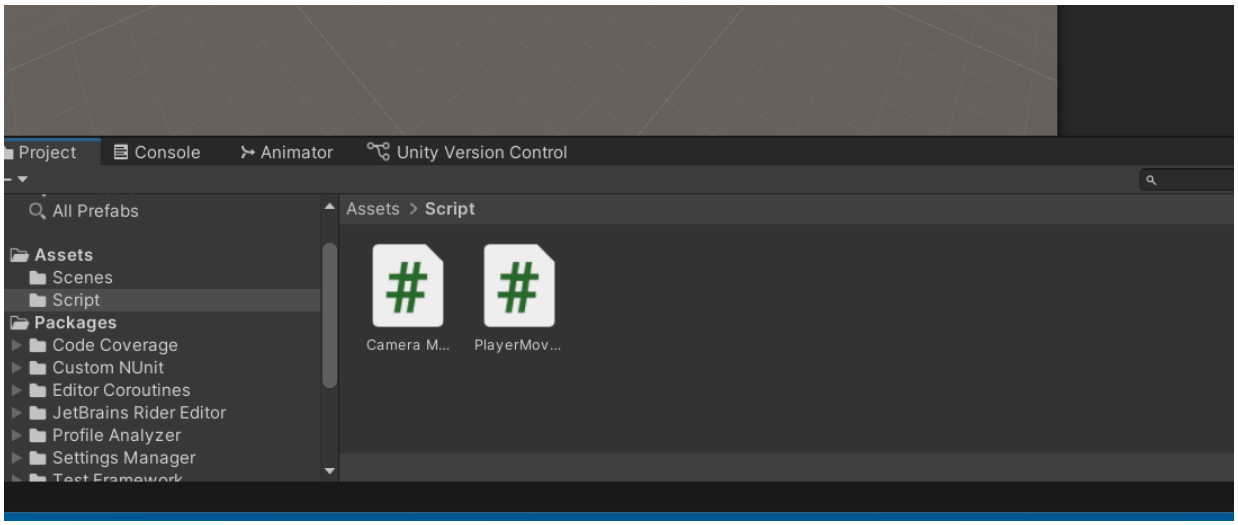


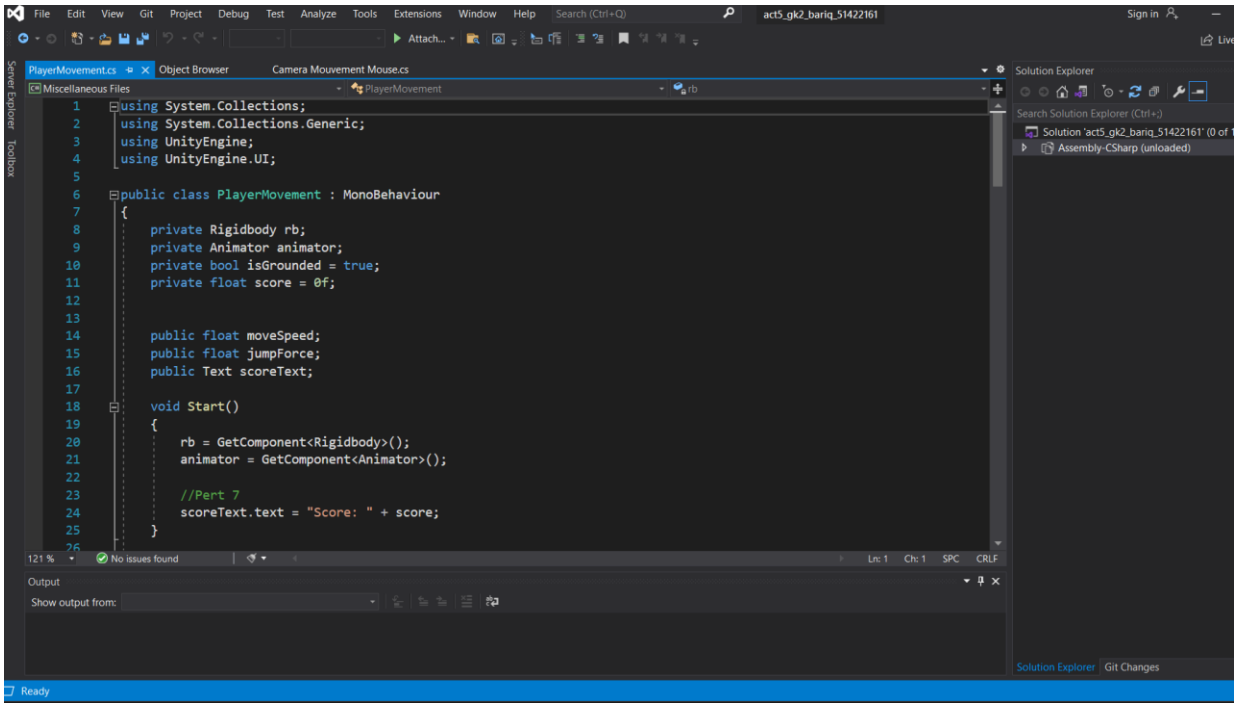

Drag n drop file tersebut ke unity asset

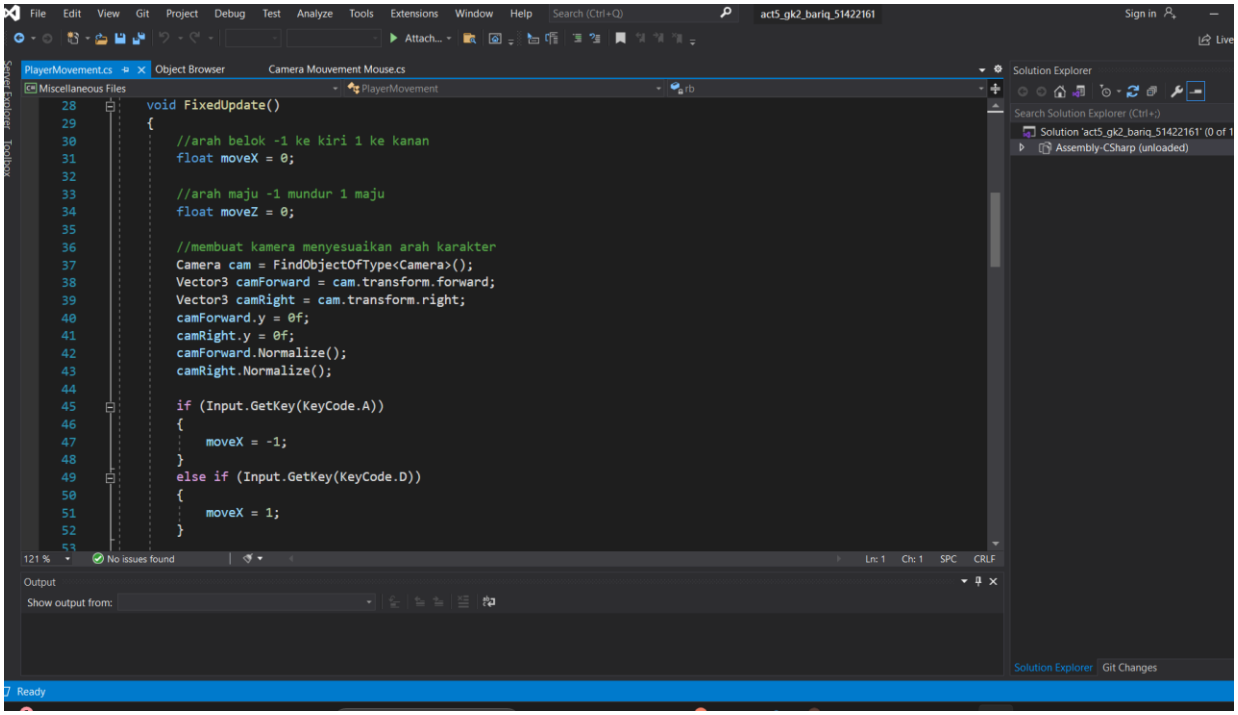


Klik 2x playerMovement akan terbuka code editor

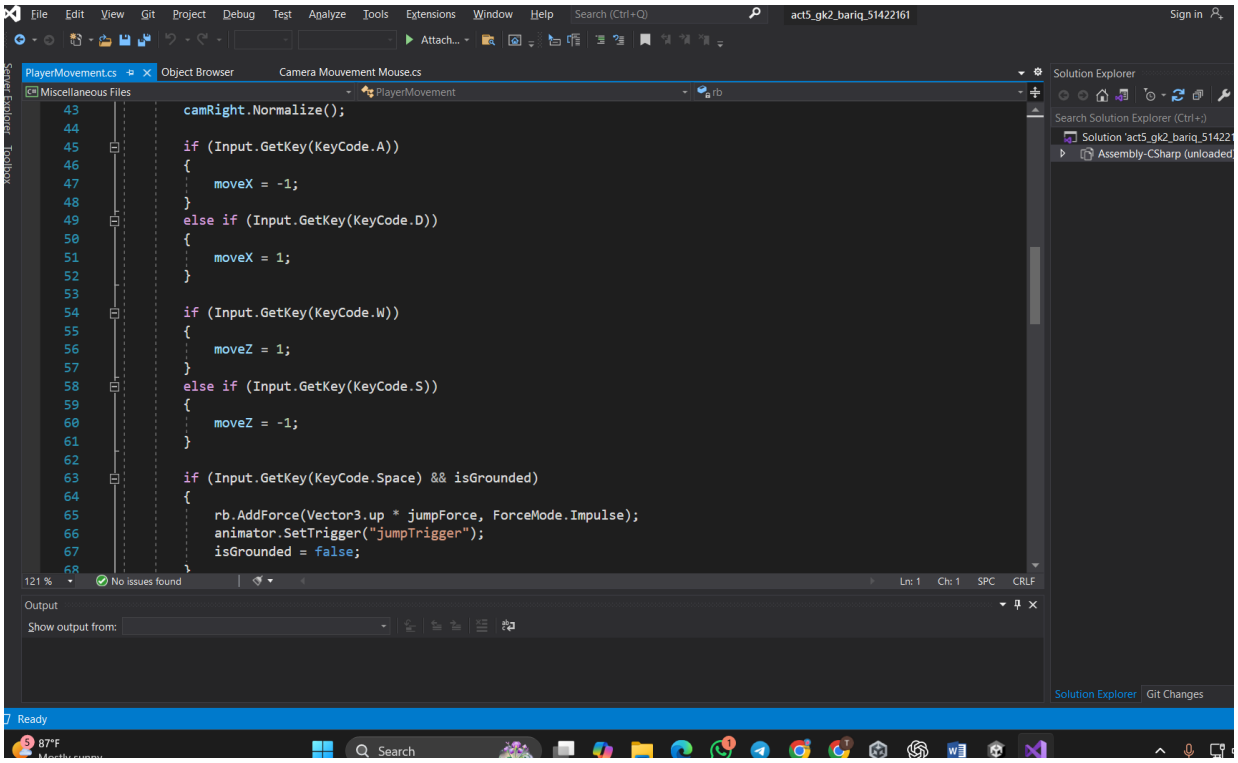



Code playerMovement.cs

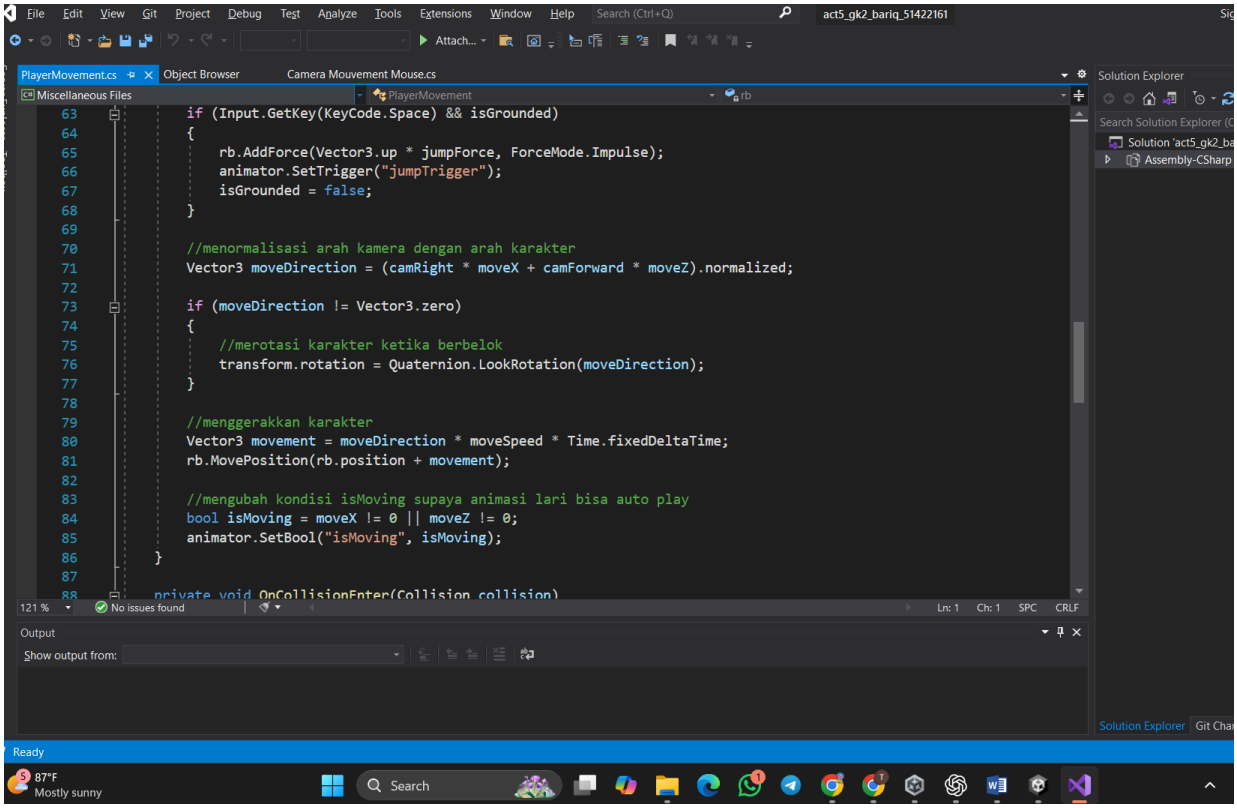




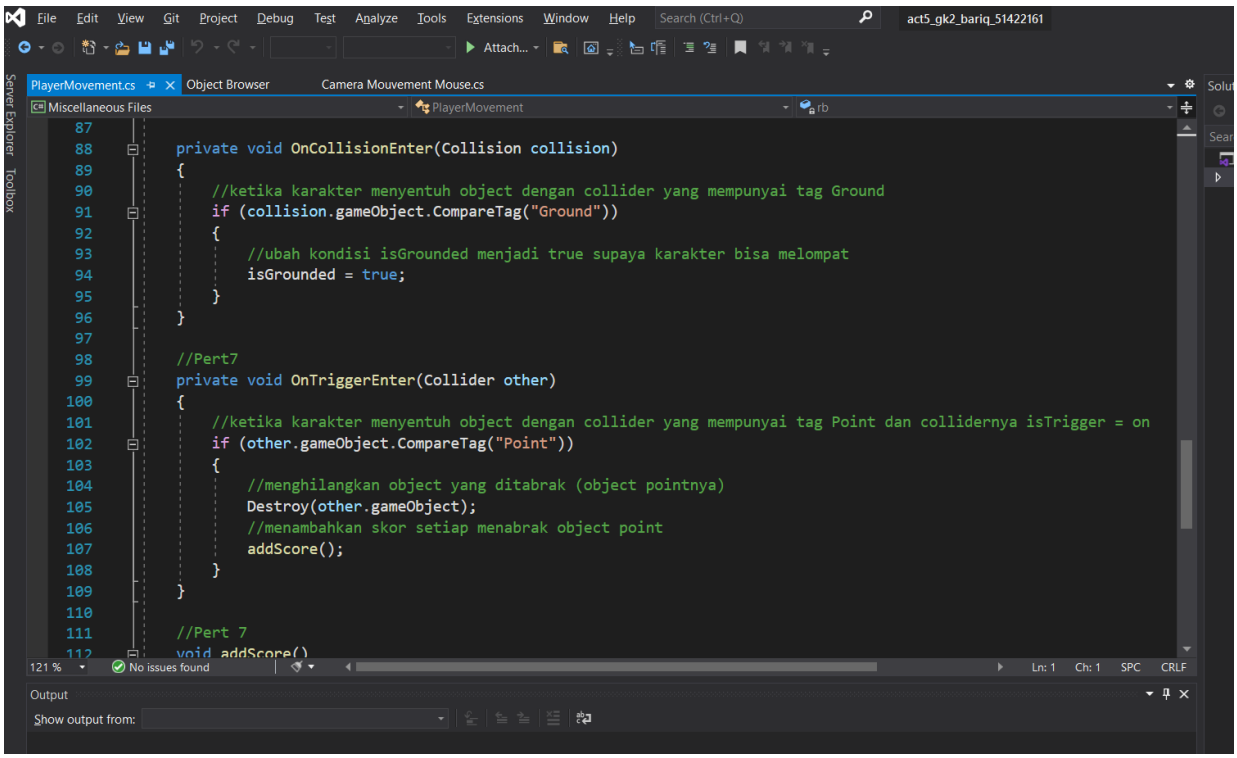
```
void FixedUpdate()
{
    //arah belok -1 ke kiri 1 ke kanan
    float moveX = 0;

    //arah maju -1 mundur 1 maju
    float moveZ = 0;

    //membuat kamera menyesuaikan arah karakter
    Camera cam = FindObjectOfType<Camera>();
    Vector3 camForward = cam.transform.forward;
    Vector3 camRight = cam.transform.right;
    camForward.y = 0f;
    camRight.y = 0f;
    camForward.Normalize();
    camRight.Normalize();

    if (Input.GetKey(KeyCode.A))
    {
        moveX = -1;
    }
    else if (Input.GetKey(KeyCode.D))
    {
        moveX = 1;
    }
```



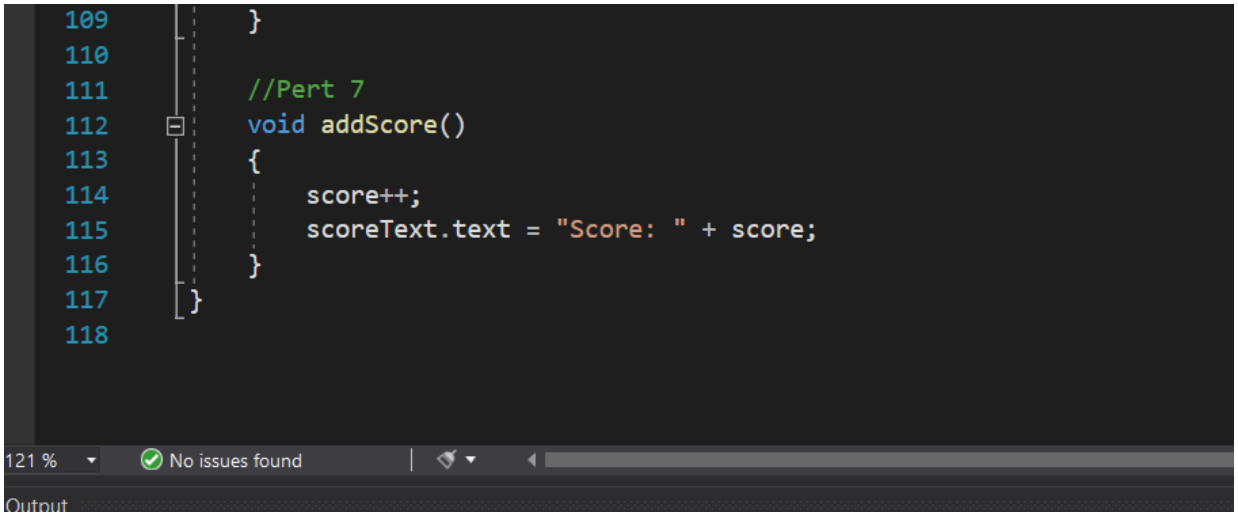
```
    camRight.Normalize();

    if (Input.GetKey(KeyCode.A))
    {
        moveX = -1;
    }
    else if (Input.GetKey(KeyCode.D))
    {
        moveX = 1;
    }

    if (Input.GetKey(KeyCode.W))
    {
        moveZ = 1;
    }
    else if (Input.GetKey(KeyCode.S))
    {
        moveZ = -1;
    }

    if (Input.GetKey(KeyCode.Space) && isGrounded)
    {
        rb.AddForce(Vector3.up * jumpForce, ForceMode.Impulse);
        animator.SetTrigger("jumpTrigger");
        isGrounded = false;
```



```
63      if (Input.GetKey(KeyCode.Space) && isGrounded)
64      {
65          rb.AddForce(Vector3.up * jumpForce, ForceMode.Impulse);
66          animator.SetTrigger("jumpTrigger");
67          isGrounded = false;
68      }
69
70      //menormalisasi arah kamera dengan arah karakter
71      Vector3 moveDirection = (camRight * moveX + camForward * moveZ).normalized;
72
73      if (moveDirection != Vector3.zero)
74      {
75          //merotasi karakter ketika berbelok
76          transform.rotation = Quaternion.LookRotation(moveDirection);
77      }
78
79      //menggerakkan karakter
80      Vector3 movement = moveDirection * moveSpeed * Time.fixedDeltaTime;
81      rb.MovePosition(rb.position + movement);
82
83      //mengubah kondisi isMoving supaya animasi lari bisa auto play
84      bool isMoving = moveX != 0 || moveZ != 0;
85      animator.SetBool("isMoving", isMoving);
86  }
87
88  private void OnCollisionEnter(Collision collision)
```



```
87
88  private void OnCollisionEnter(Collision collision)
89  {
90      //ketika karakter menyentuh object dengan collider yang mempunyai tag Ground
91      if (collision.gameObject.CompareTag("Ground"))
92      {
93          //ubah kondisi isGrounded menjadi true supaya karakter bisa melompat
94          isGrounded = true;
95      }
96  }
97
98  //Pert7
99  private void OnTriggerEnter(Collider other)
100 {
101     //ketika karakter menyentuh object dengan collider yang mempunyai tag Point dan collidernya isTrigger = on
102     if (other.gameObject.CompareTag("Point"))
103     {
104         //menghilangkan object yang ditabrak (object pointnya)
105         Destroy(other.gameObject);
106         //menambahkan skor setiap menabrak object point
107         addScore();
108     }
109 }
110
111 //Pert 7
112 void addScore()
```


109 }
110
111 //Pert 7
112 void addScore()
113 {
114 score++;
115 scoreText.text = "Score: " + score;
116 }
117 }
118
121 %
No issues found
Output