- Update Function

RunService.Heartbeat:Connect(function(dT)

-- Assign character air status

character.inTheAir = HelperFunctions:CheckIfHumanoidIsInTheAir(hum)

-- Check jump status and movement keys

local noButtonsPressed = HelperFunctions:CheckValuesInTable(keysPressed, directionValues, false)

 $local\ has Not Jumped = Helper Functions: Check Values In Table (character. jump Started, jump Values, false)$

-- Calculate move direction

 $moveVector = AccelerationController: CalculateCorrectAcceleration(keysPressed, \\ moveVector, character)$

local direction = humanoid.CFrame:VectorToWorldSpace(moveVector)

-- Handle Direction Control

AccelerationController:DirectionControl(character, moveVector, direction, dT, humanoid, noButtonsPressed)

-- Deceleration

AccelerationController:Decelerate(character, hasNotJumped, dT)

-- Update velocity based on current jump status

if hasNotJumped then

--Apply normal gravity to player

Gravity:EnforceNormalGravity(character, dT)

else

--- If we are jumping then calculate correct velocity

character:CheckJumpForces(character, dT, humanoid)

end

-- Check if we have pressed any jumping key

local notPressingJumpKey = HelperFunctions:CheckValuesInTable(jumpKeys, jumpKeyValues, false)

-- If we have jumped then do the jump

if not notPressingJumpKey then

character: CheckJump(hum, humanoid, moveVector, jumpKeys, character)

end

-- Limit speed

SpeedController:ControlSpeed(character, hasNotJumped)

 $humanoid. Velocity = character. saved Normal Velocity + character. saved Platform Velocity \\ end)$