Option Explicit

Public Mario As Character

Private Declare PtrSafe Sub Sleep Lib "kernel32.dll" (ByVal dwMilliseconds As Long)

Dim NextTile1 As String

Dim NextTile2 As String

Dim rOff As Integer

Dim cOff As Integer

Dim rOff2 As Integer

Dim cOff2 As Integer

Dim IceOn As Boolean

Dim i As Integer

Dim j As Integer

Dim a As Variant

Dim b As Range

Dim TempColor(1 To 2, 1 To 2) As Integer

Dim TempVal(1 To 2, 1 To 2) As String

Dim wsGame As Worksheet

Dim wsMaps As Worksheet

Public MarioRow As Integer

Public MarioCol As Integer

Private Tile As Variant

Public Const BgV = "Floor"

Private lastRow As Variant

Public CharLife As Integer

Public ColorMap As Variant

Public Sono As Integer

Dim Move As Integer

Dim ColorArray(1 To 57) As String

Dim ColorArray2(1 To 57) As Integer

Const CharValue = "Mario"

Const CharColor = 45

Const FloorColor = 36

Const Step = 1

Const cSleep = 0

Const pInicialY = 3

Const pInicialX = 38

Const constWalls = 404

Const MainMapCols = 310

Const MainMapRows = 122

Const FireDamage = 20

Const FireBacking = 1

Sub ItemsColors()

lastRow = Worksheets("Data").Range("d1").value + 1

For i = 1 To lastRow

ColorArray(i) = Worksheets("Data").Cells(2 + i, 3).value

ColorArray2(i) = Worksheets("data").Cells(2 + i, 4).value

Next i

End Sub

Sub MainMap()

Dim lastRowTable As Integer

lastRowTable = Worksheets("data").Range("D1").value

ColorMap = Worksheets("Data").Range("c3:D" & 3 + lastRowTable).value

CharLife = 1000

MarioRow = pInicialX

MarioCol = pInicialY

Sono = 0

rOff = 0

cOff = 0

rOff2 = 0

cOff2 = 0

End Sub

Sub MapUpdate()

Dim MapUpdate As Variant

Dim ColorMap As Variant

Dim lastRowTable As Integer

lastRowTable = Worksheets("data").Range("D1").value

Worksheets("game").Activate

ActiveSheet.Cells.Select

Selection.ColumnWidth = 0.4

Selection.RowHeight = 4

Selection.NumberFormat = ";;;"

MapUpdate = Worksheets("Maps").Range("A1:KX122").value

ColorMap = Worksheets("Data").Range("c3:D" & 3 + lastRowTable).value

Worksheets("Game").Range("A1:KX122") = MapUpdate

For i = 1 To 122

For j = 1 To 310

Worksheets("Game").Cells(i, j).Interior.ColorIndex = WorksheetFunction.VLookup(MapUpdate(i, j), ColorMap, 2, False)

Next j

Next i

End Sub

Public Sub CharacterStart()

Worksheets("game").Activate

Set Mario = New Character

Mario.cPosX = pInicialX

Mario.cPosY = pInicialY

Set Mario.cLocation = Range(Cells(Mario.cPosX, Mario.cPosY), Cells(Mario.cPosX + 1, Mario.cPosY + 1))

Mario.cLocation.Interior.ColorIndex = CharColor

Mario.cLocation.value = CharValue

Range("a1").Select

End Sub

Sub Maps()

Worksheets("Maps").Activate

ActiveSheet.Cells.Select

Selection.ColumnWidth = 0.4

Selection.RowHeight = 4

Selection.NumberFormat = ";;;"

End Sub

Function Move()

Set wsGame = Worksheets("game")

Set wsMaps = Worksheets("Maps")

On Error Resume Next

If ActiveSheet.Name = "Game" Then

Begin:

NextTile1 = Cells(MarioRow + rOff, MarioCol + cOff)

NextTile2 = Cells(MarioRow + rOff2, MarioCol + cOff2)

If (NextTile1 = "Wall" Or NextTile2 = "Wall" Or NextTile1 = "Trees" Or NextTile2 = "Trees" Or NextTile1 = "Water" Or NextTile2 = "Water" Or NextTile1 = "House" Or NextTile2 = "House") Then

Exit Function

ElseIf NextTile1 = "Door" And NextTile2 = "Door" Then

Call DoorEnter

ElseIf (NextTile1 = "Enemy" Or NextTile2 = "Enemy" Or NextTile1 = "EnSightGrass" Or NextTile2 = "EnSightGrass" Or NextTile1 = "EnSightFloor" Or NextTile2 = "EnSightFloor") Then

Call Fight

ElseIf (NextTile1 = "Fire" Or NextTile2 = "Fire") Then

Call Fire

GoTo walk

ElseIf (NextTile1 = "Treasure" Or NextTile2 = "Treasure") Then

Call TreasureFound

ElseIf (NextTile1 = "Poison" Or NextTile2 = "Poison") Then

Call Poison

ElseIf (NextTile1 = "Hole" Or NextTile2 = "Hole") Then

Call Fall

Else

GoTo walk

walk:

For i = 1 To 2

For j = 1 To 2

TempColor(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex

TempVal(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Value2

Next j

Next i

Set Mario.cLocation = Mario.cLocation.Offset(0, Move)

For i = 1 To 2

For j = 1 To 2

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1) = TempVal(i, j)

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex = TempColor(i, j)

Next j

Next i

Mario.cLocation.value = CharValue

Mario.cLocation.Interior.ColorIndex = CharColor

MarioCol = MarioCol + Move

Sleep Sono

If IceOn Then

i = 1

Do While NextTile1 = "Ice" And NextTile2 = "Ice" Or i = 30

GoTo Begin

i = i + 1

Loop

End If

End If

Else

Selection.Offset(0, 1).Select

End If

End Function

Public Function MoveRight()

Set wsGame = Worksheets("game")

Set wsMaps = Worksheets("Maps")

Dim NextTile1 As String

Dim NextTile2 As String

Dim rOff As Integer

Dim cOff As Integer

rOff = 0

cOff = 2

On Error Resume Next

Move = 1

If ActiveSheet.Name = "Game" Then

Begin:

NextTile1 = Cells(MarioRow + rOff, MarioCol + cOff)

NextTile2 = Cells(MarioRow + rOff + 1, MarioCol + cOff)

If (NextTile1 = "Wall" Or NextTile2 = "Wall" Or NextTile1 = "Trees" Or NextTile2 = "Trees" Or NextTile1 = "Water" Or NextTile2 = "Water" Or NextTile1 = "House" Or NextTile2 = "House") Then

Exit Function

ElseIf NextTile1 = "Door" And NextTile2 = "Door" Then

Call DoorEnter

ElseIf (NextTile1 = "Enemy" Or NextTile2 = "Enemy" Or NextTile1 = "EnSightGrass" Or NextTile2 = "EnSightGrass" Or NextTile1 = "EnSightFloor" Or NextTile2 = "EnSightFloor") Then

Call Fight

ElseIf (NextTile1 = "Fire" Or NextTile2 = "Fire") Then

Call Fire

GoTo walk

ElseIf (NextTile1 = "Treasure" Or NextTile2 = "Treasure") Then

Call TreasureFound

ElseIf (NextTile1 = "Poison" Or NextTile2 = "Poison") Then

Call Poison

ElseIf (NextTile1 = "Hole" Or NextTile2 = "Hole") Then

Call Fall

Else

GoTo walk

walk:

For i = 1 To 2

For j = 1 To 2

TempColor(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex

TempVal(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Value2

Next j

Next i

Set Mario.cLocation = Mario.cLocation.Offset(0, Move)

For i = 1 To 2

For j = 1 To 2

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1) = TempVal(i, j)

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex = TempColor(i, j)

Next j

Next i

Mario.cLocation.value = CharValue

Mario.cLocation.Interior.ColorIndex = CharColor

MarioCol = MarioCol + Move

Sleep Sono

If IceOn Then

i = 1

Do While NextTile1 = "Ice" And NextTile2 = "Ice" Or i = 30

GoTo Begin

i = i + 1

Loop

End If

End If

Else

Selection.Offset(0, 1).Select

End If

End Function

Public Function MoveLeft()

Set wsGame = Worksheets("game")

Set wsMaps = Worksheets("Maps")

Dim NextTile1 As String

Dim NextTile2 As String

Dim rOff As Integer

Dim cOff As Integer

rOff = 0

cOff = -1

Move = 1

On Error Resume Next

If ActiveSheet.Name = "Game" Then

Begin:

NextTile1 = Cells(MarioRow + rOff, MarioCol + cOff)

NextTile2 = Cells(MarioRow + rOff + 1, MarioCol + cOff)

If (NextTile1 = "Wall" Or NextTile2 = "Wall" Or NextTile1 = "Trees" Or NextTile2 = "Trees" Or NextTile1 = "Water" Or NextTile2 = "Water" Or NextTile1 = "House" Or NextTile2 = "House") Then

Exit Function

ElseIf NextTile1 = "Door" And NextTile2 = "Door" Then

Call DoorEnter

ElseIf (NextTile1 = "Enemy" Or NextTile2 = "Enemy" Or NextTile1 = "EnSightGrass" Or NextTile2 = "EnSightGrass" Or NextTile1 = "EnSightFloor" Or NextTile2 = "EnSightFloor") Then

Call Fight

ElseIf (NextTile1 = "Fire" Or NextTile2 = "Fire") Then

Call Fire

GoTo walk

ElseIf (NextTile1 = "Treasure" Or NextTile2 = "Treasure") Then

Call TreasureFound

ElseIf (NextTile1 = "Poison" Or NextTile2 = "Poison") Then

Call Poison

ElseIf (NextTile1 = "Hole" Or NextTile2 = "Hole") Then

Call Fall

Else

GoTo walk

walk:

For i = 1 To 2

For j = 1 To 2

TempColor(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex

TempVal(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Value2

Next j

Next i

Set Mario.cLocation = Mario.cLocation.Offset(0, -Move)

For i = 1 To 2

For j = 1 To 2

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1) = TempVal(i, j)

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex = TempColor(i, j)

Next j

Next i

Mario.cLocation.value = CharValue

Mario.cLocation.Interior.ColorIndex = CharColor

MarioCol = MarioCol - Move

Sleep Sono

If IceOn Then

i = 1

Do While NextTile1 = "Ice" And NextTile2 = "Ice" Or i = 30

GoTo Begin

i = i + 1

Loop

End If

End If

Else

Selection.Offset(0, -1).Select

End If

End Function

Public Function MoveUp()

Set wsGame = Worksheets("game")

Set wsMaps = Worksheets("Maps")

Dim NextTile1 As String

Dim NextTile2 As String

Dim rOff As Integer

Dim cOff As Integer

rOff = -1

cOff = 0

Move = 1

On Error Resume Next

If ActiveSheet.Name = "Game" Then

Begin:

NextTile1 = Cells(MarioRow + rOff, MarioCol + cOff)

NextTile2 = Cells(MarioRow + rOff, MarioCol + cOff + 1)

If (NextTile1 = "Wall" Or NextTile2 = "Wall" Or NextTile1 = "Trees" Or NextTile2 = "Trees" Or NextTile1 = "Water" Or NextTile2 = "Water" Or NextTile1 = "House" Or NextTile2 = "House") Then

Exit Function

ElseIf NextTile1 = "Door" And NextTile2 = "Door" Then

Call DoorEnter

ElseIf (NextTile1 = "Enemy" Or NextTile2 = "Enemy" Or NextTile1 = "EnSightGrass" Or NextTile2 = "EnSightGrass" Or NextTile1 = "EnSightFloor" Or NextTile2 = "EnSightFloor") Then

Move = -1

CharLife = CharLife - FireDamage

ElseIf (NextTile1 = "Fire" Or NextTile2 = "Fire") Then

Call Fire

GoTo walk

ElseIf (NextTile1 = "Treasure" Or NextTile2 = "Treasure") Then

Call TreasureFound

ElseIf (NextTile1 = "Poison" Or NextTile2 = "Poison") Then

Call Poison

ElseIf (NextTile1 = "Hole" Or NextTile2 = "Hole") Then

Call Fall

Else

GoTo walk

walk:

For i = 1 To 2

For j = 1 To 2

TempColor(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex

TempVal(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Value2

Next j

Next i

Set Mario.cLocation = Mario.cLocation.Offset(-Move, 0)

For i = 1 To 2

For j = 1 To 2

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1) = TempVal(i, j)

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex = TempColor(i, j)

Next j

Next i

Mario.cLocation.value = CharValue

Mario.cLocation.Interior.ColorIndex = CharColor

MarioRow = MarioRow - Move

Sleep Sono

If IceOn Then

i = 1

Do While NextTile1 = "Ice" And NextTile2 = "Ice" Or i = 30

GoTo Begin

i = i + 1

Loop

End If

End If

Else

Selection.Offset(-1, 0).Select

End If

End Function

Public Function MoveDown()

Set wsGame = Worksheets("game")

Set wsMaps = Worksheets("Maps")

Dim NextTile1 As String

Dim NextTile2 As String

Dim rOff As Integer

Dim cOff As Integer

rOff = 2

cOff = 0

Move = 1

On Error Resume Next

If ActiveSheet.Name = "Game" Then

Begin:

NextTile1 = Cells(MarioRow + rOff, MarioCol + cOff)

NextTile2 = Cells(MarioRow + rOff, MarioCol + cOff + 1)

If (NextTile1 = "Wall" Or NextTile2 = "Wall" Or NextTile1 = "Trees" Or NextTile2 = "Trees" Or NextTile1 = "Water" Or NextTile2 = "Water" Or NextTile1 = "House" Or NextTile2 = "House") Then

Exit Function

ElseIf NextTile1 = "Door" And NextTile2 = "Door" Then

Call DoorEnter

ElseIf (NextTile1 = "Enemy" Or NextTile2 = "Enemy" Or NextTile1 = "EnSightGrass" Or NextTile2 = "EnSightGrass" Or NextTile1 = "EnSightFloor" Or NextTile2 = "EnSightFloor") Then

Call Fight

ElseIf (NextTile1 = "Fire" Or NextTile2 = "Fire") Then

Call Fire

GoTo walk

ElseIf (NextTile1 = "Treasure" Or NextTile2 = "Treasure") Then

Call TreasureFound

ElseIf (NextTile1 = "Poison" Or NextTile2 = "Poison") Then

Call Poison

ElseIf (NextTile1 = "Hole" Or NextTile2 = "Hole") Then

Call Fall

Else

GoTo walk

walk:

For i = 1 To 2

For j = 1 To 2

TempColor(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex

TempVal(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Value2

Next j

Next i

Set Mario.cLocation = Mario.cLocation.Offset(Move, 0)

For i = 1 To 2

For j = 1 To 2

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1) = TempVal(i, j)

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex = TempColor(i, j)

Next j

Next i

Mario.cLocation.value = CharValue

Mario.cLocation.Interior.ColorIndex = CharColor

MarioRow = MarioRow + Move

Sleep Sono

If IceOn Then

i = 1

Do While NextTile1 = "Ice" And NextTile2 = "Ice" Or i = 30

GoTo Begin

i = i + 1

Loop

End If

End If

Else

Selection.Offset(1, 0).Select

End If

End Function

Public Sub EndGame()

For i = 1 To 2

For j = 1 To 2

TempColor(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex

TempVal(i, j) = wsMaps.Cells(MarioRow + i - 1, MarioCol + j - 1).Value2

Next j

Next i

For i = 1 To 2

For j = 1 To 2

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1) = TempVal(i, j)

wsGame.Cells(MarioRow + i - 1, MarioCol + j - 1).Interior.ColorIndex = TempColor(i, j)

Next j

Next i

End Sub

Public Sub ClearArea()

Dim eraseColor(1 To 100, 1 To 100) As Integer

Dim eraseVal(1 To 100, 1 To 100) As String

Set wsMaps = Worksheets("Maps")

Set wsGame = Worksheets("game")

Dim g As Integer

Dim h As Integer

Dim t As Integer

Dim s As Integer

g = Selection.Rows.Count

h = Selection.Columns.Count

t = Selection.Row

s = Selection.Column

For i = 1 To g

For j = 1 To h

eraseColor(i, j) = wsMaps.Cells(t + i - 1, s + j - 1).Interior.ColorIndex

eraseVal(i, j) = wsMaps.Cells(t + i - 1, s + j - 1).Value2

Next j

Next i

For i = 1 To Selection.Rows.Count

For j = 1 To Selection.Columns.Count

wsGame.Cells(t + i - 1, s + j - 1) = eraseVal(i, j)

wsGame.Cells(t + i - 1, s + j - 1).Interior.ColorIndex = eraseColor(i, j)

Next j

Next i

End Sub

Sub Poison()

Sono = 500

End Sub

Sub DoorEnter()

End Sub

Sub TreasureFound()

End Sub

Sub Pare()

End Sub

Sub Fight()

End Sub

Sub Fall()

End Sub

Sub Fire()

Move = -FireBacking

CharLife = CharLife - FireDamage

End Sub

Sub IceSlide()

End Sub