

Create a NEW C# Windows Forms Application, and call it Pacman
Right-click in solution explorer on the solution name and add a new Class. Call this
'GameClasses' and replace the contents with the skeleton code provided.
Use the pseudocode below to add to the code.
(This in continued on next page!)

Class GameCharacter

Def Move():

```
If dir is "L" and not WillHitWall() then X←X-2  
Else If dir is "R" and not WillHitWall() then X←X+2  
Else If dir is "U" and not WillHitWall() then Y←Y-2  
Else If dir is "D" and not WillHitWall() then Y←Y+2  
Else dir←""
```

Class Ghost

```
Def ChooseDirection():
    validDirections←[]
    if CanMoveUp() then add "U" to validDirections
    if CanMoveDown() then add "D" to validDirections
    if CanMoveLeft() then add "L" to validDirections
    if CanMoveRight() then add "R" to validDirections

    if dir is "L" then remove "R" from validDirections
    if dir is "R" then remove "L" from validDirections
    if dir is "U" then remove "D" from validDirections
    if dir is "D" then remove "U" from validDirections

    if len(validDirections) = 1 then:
        dir←validDirections[0]
    else:
        if dir is "U" or "D":
            if scared is True:
                if player.X < X then dir←"R"
                else: dir←"L"
            else:
                if player.X < X then dir←"L"
                else: dir←"R"
        if dir is "L" or "R":
            if scared is True:
                if player.Y < Y then dir←"D"
                else: dir←"U"
            else:
                if player.Y < Y then dir←"U"
                else: dir←"D"

Def SetScared():
    If scared is False then:
        If dir is "L" then dir←"R"
        Else if dir is "R" then dir←"L"
        Else if dir is "U" then dir←"D"
        Else if dir is "D" then dir←"U"

    scared←True
    scaredTimer←scaredTimer+500

Def Move():
    Base.Move()
```

```
If scared is True and scaredTimer > 0 then:  
    scaredTimer ← scaredTimer -1  
    if scaredTimer is 0 then:  
        scared←False
```