Sub main**()**

' get data from sheet

numberoftrials **=** Range**(**"C2"**).**Value

numberOfRolls **=** Range**(**"C3"**).**Value

turn\_counter **=** **1**

global\_counter **=** **0**

For j **=** **1** To numberoftrials

'set starting state of camels

'location, height,in stack (T,F)

Camel\_1 **=** Array**(0,** **3,** True**)**

Camel\_2 **=** Array**(0,** **2,** True**)**

Camel\_3 **=** Array**(0,** **1,** True**)**

global\_counter **=** **0**

Range**(**"C7:ZZ9"**).**Value **=** Null

Range**(**"C18:ZZ18"**).**Value **=** Null

For i **=** **1** To **3** **\*** numberOfRolls

diceroll **=** WorksheetFunction.RandBetween**(1,** **3)**

global\_counter **=** global\_counter **+** **1**

Cells**(18,** **2** **+** global\_counter**).**Value **=** diceroll

If turn\_counter **=** **1** Then

Call camel\_moving**(**Camel\_1**,** Camel\_2**,** Camel\_3**,** diceroll**)**

Call updateVisual**(**Camel\_1**,** Camel\_2**,** Camel\_3**)**

turn\_counter **=** **2**

ElseIf turn\_counter **=** **2** Then

Call camel\_moving**(**Camel\_2**,** Camel\_1**,** Camel\_3**,** diceroll**)**

Call updateVisual**(**Camel\_1**,** Camel\_2**,** Camel\_3**)**

turn\_counter **=** **3**

ElseIf turn\_counter **=** **3** Then

Call camel\_moving**(**Camel\_3**,** Camel\_1**,** Camel\_2**,** diceroll**)**

Call updateVisual**(**Camel\_1**,** Camel\_2**,** Camel\_3**)**

turn\_counter **=** **1**

End If

Next i

If Camel\_1**(0)** **=** Camel\_2**(0)** And Camel\_1**(0)** **=** Camel\_3**(0)** Then

Range**(**"C15"**).**Value **=** Range**(**"C15"**).**Value **+** **1**

Else

Range**(**"C14"**).**Value **=** Range**(**"C14"**).**Value **+** **1**

End If

Next j

End Sub

Sub Camel\_Moved**(**movingCamel**,** staticCamel1**,** staticCamel2**)**

'case 1.1 space is empty

If movingCamel**(0)** **<>** staticCamel1**(0)** And movingCamel**(0)** **<>** staticCamel2**(0)** Then

movingCamel**(2)** **=** False

movingCamel**(1)** **=** **1**

'case 1.2 staticCamel1 and camel\_3 on space

ElseIf movingCamel**(0)** **=** staticCamel1**(0)** And movingCamel**(0)** **=** staticCamel2**(0)** Then

movingCamel**(2)** **=** True

movingCamel**(1)** **=** **3**

'case 1.3 camel\_2 is on space only

ElseIf movingCamel**(0)** **=** staticCamel1**(0)** And movingCamel**(0)** **<>** staticCamel2**(0)** Then

movingCamel**(2)** **=** True

staticCamel1**(2)** **=** True

movingCamel**(1)** **=** **2**

staticCamel2**(2)** **=** False

'case 1.4 camel\_3 is on space only

ElseIf movingCamel**(0)** **=** staticCamel2**(0)** And movingCamel**(0)** **<>** staticCamel1**(0)** Then

movingCamel**(2)** **=** True

staticCamel2**(2)** **=** True

movingCamel**(1)** **=** **2**

staticCamel1**(2)** **=** False

End If

End Sub

Sub camel\_moving**(**player**,** passenger1**,** passenger2**,** moveCount**)**

'check if there is a stack present

If player**(2)** **=** True Then

If passenger1**(0)** **<>** player**(0)** And passenger2**(0)** **<>** player**(0)** Then

player**(2)** **=** False

End If

End If

'case 1 - not in a stack

If player**(2)** **=** False Then

player**(0)** **=** player**(0)** **+** moveCount

Call Camel\_Moved**(**player**,** passenger1**,** passenger2**)**

'case 2 - in stack

ElseIf player**(2)** **=** True Then

'case 2.1 - top of stack of 3

If player**(1)** **=** **3** Then

player**(0)** **=** player**(0)** **+** moveCount

Call Camel\_Moved**(**player**,** passenger1**,** passenger2**)**

'case 2.2 - top of stack of 2

ElseIf player**(1)** **=** **2** And **(**passenger1**(1)** **=** **1** Or passenger1**(0)** **<>** player**(0))** And **(**passenger2**(1)** **=** **1** Or passenger2**(0)** **<>** player**(0))** Then

player**(0)** **=** player**(0)** **+** moveCount

Call Camel\_Moved**(**player**,** passenger1**,** passenger2**)**

'case 2.3 - middle of stack

ElseIf player**(1)** **=** **2** And passenger1**(1)** **=** **3** Then

player**(0)** **=** player**(0)** **+** moveCount

Call Camel\_Moved**(**player**,** passenger1**,** passenger2**)**

passenger1**(0)** **=** player**(0)**

passenger1**(1)** **=** player**(1)** **+** **1**

passenger1**(2)** **=** True

player**(2)** **=** True

ElseIf player**(1)** **=** **2** And passenger2**(1)** **=** **3** Then

player**(0)** **=** player**(0)** **+** moveCount

Call Camel\_Moved**(**player**,** passenger1**,** passenger2**)**

passenger2**(0)** **=** player**(0)**

passenger2**(1)** **=** player**(1)** **+** **1**

passenger2**(2)** **=** True

player**(2)** **=** True

'case 2.4 - bottom of stack of 3

ElseIf player**(1)** **=** **1** And player**(0)** **=** passenger1**(0)** And player**(0)** **=** passenger2**(0)** Then

player**(0)** **=** player**(0)** **+** moveCount

Call Camel\_Moved**(**player**,** passenger1**,** passenger2**)**

passenger1**(0)** **=** player**(0)**

passenger2**(0)** **=** player**(0)**

player**(2)** **=** True

'case 2.5 - bottom of stack of 2

ElseIf player**(1)** **=** **1** And **(**passenger1**(0)** **=** player**(0)** Or passenger2**(0)** **=** player**(0))** Then

If passenger1**(0)** **=** player**(0)** Then

player**(0)** **=** player**(0)** **+** moveCount

Call Camel\_Moved**(**player**,** passenger1**,** passenger2**)**

passenger1**(0)** **=** player**(0)**

passenger1**(1)** **=** player**(1)** **+** **1**

player**(2)** **=** True

ElseIf passenger2**(0)** **=** player**(0)** Then

player**(0)** **=** player**(0)** **+** moveCount

Call Camel\_Moved**(**player**,** passenger1**,** passenger2**)**

passenger2**(0)** **=** player**(0)**

passenger2**(1)** **=** player**(1)** **+** **1**

player**(2)** **=** True

End If

End If

End If

End Sub

Sub updateVisual**(**cam1**,** cam2**,** cam3**)**

Cells**(10** **-** cam1**(1),** **2** **+** cam1**(0)).**Value **=** **1**

Cells**(10** **-** cam2**(1),** **2** **+** cam2**(0)).**Value **=** **2**

Cells**(10** **-** cam3**(1),** **2** **+** cam3**(0)).**Value **=** **3**

End Sub