'DiceRolls

'Unit 7.01

'Rolls three dice (total of 18 possible numbers)

'counts the times a number came up, puts it in a list box.

'in the listbox the numbers on the right add up to the number entered in the textbox

'the number 10 comes up most often

PublicClassForm1

PrivateSubbtnRollDice\_Click**(**ByValsenderAsObject**, \_**

ByValeAsSystem**.**EventArgs**)** HandlesbtnRollDice**.**Click

Dimcounts**(**18**)** AsInteger

DimnumRollsAsInteger **=** Val**(**Me**.**txtRolls**.**Text**)**

CallCountTrials**(**numRolls**,** counts**)**

CallDisplayRollsCounts**(**counts**,** Me**.**lstRollsOutcomes**)**

EndSub

'Simulates numRolls rolls of three dice and keeps a count of the

'outcomes.

'

'pre: counts has elements with at least index values 2 through 18.

'post: numRolls dice rolls have been simulated. Counts of numRolls

'simulated dice rolls has been stored in counts.

'

SubCountTrials**(**ByValnumRollsAsInteger**, \_**

ByRefcounts**()** AsInteger**)**

DimrollOutcomeAsInteger

Randomize**()**

ForrollAsInteger **=** 1TonumRolls

rollOutcome **= (**Int**(**6 **\*** Rnd**() +** 1**)) + (**Int**(**6 **\*** Rnd**() +** 1**)) + (**Int**(**6 **\*** Rnd**() +** 1**))**

counts**(**rollOutcome**) +=** 1

Nextroll

EndSub

'Displays the contents of counts() in a list box.

'

'pre: counts has elements with at least index values 2 through 18.

'post: Elements of counts() have been displayed in a list box.

'

SubDisplayRollsCounts**(**ByRefcounts**()** AsInteger**, \_**

ByReflstListAsListBox**)**

ForrollOutcomeAsInteger **=** 2To18

lstList**.**Items**.**Add**(**rollOutcome **&** vbTab **&** counts**(**rollOutcome**))**

NextrollOutcome

EndSub

PrivateSubtxtRolls\_TextChanged**(**ByValsenderAsObject**, \_**

ByValeAsSystem**.**EventArgs**)** HandlestxtRolls**.**TextChanged

Me**.**lstRollsOutcomes**.**Items**.**Clear**()**

EndSub

PrivateSubForm1\_Load**(**ByValsenderAsSystem**.**Object**,** ByValeAsSystem**.**EventArgs**)** HandlesMyBase**.**Load

EndSub

EndClass