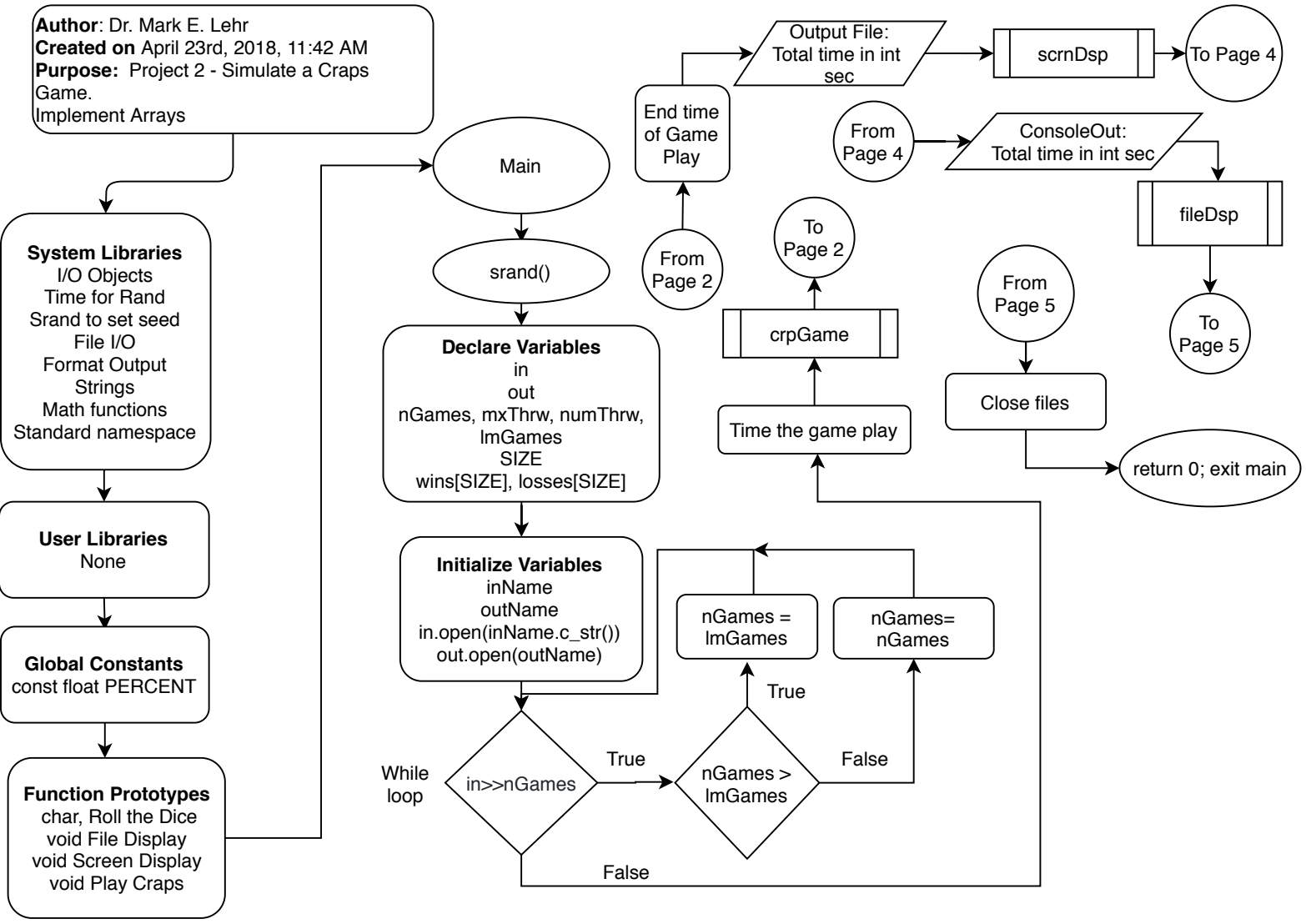
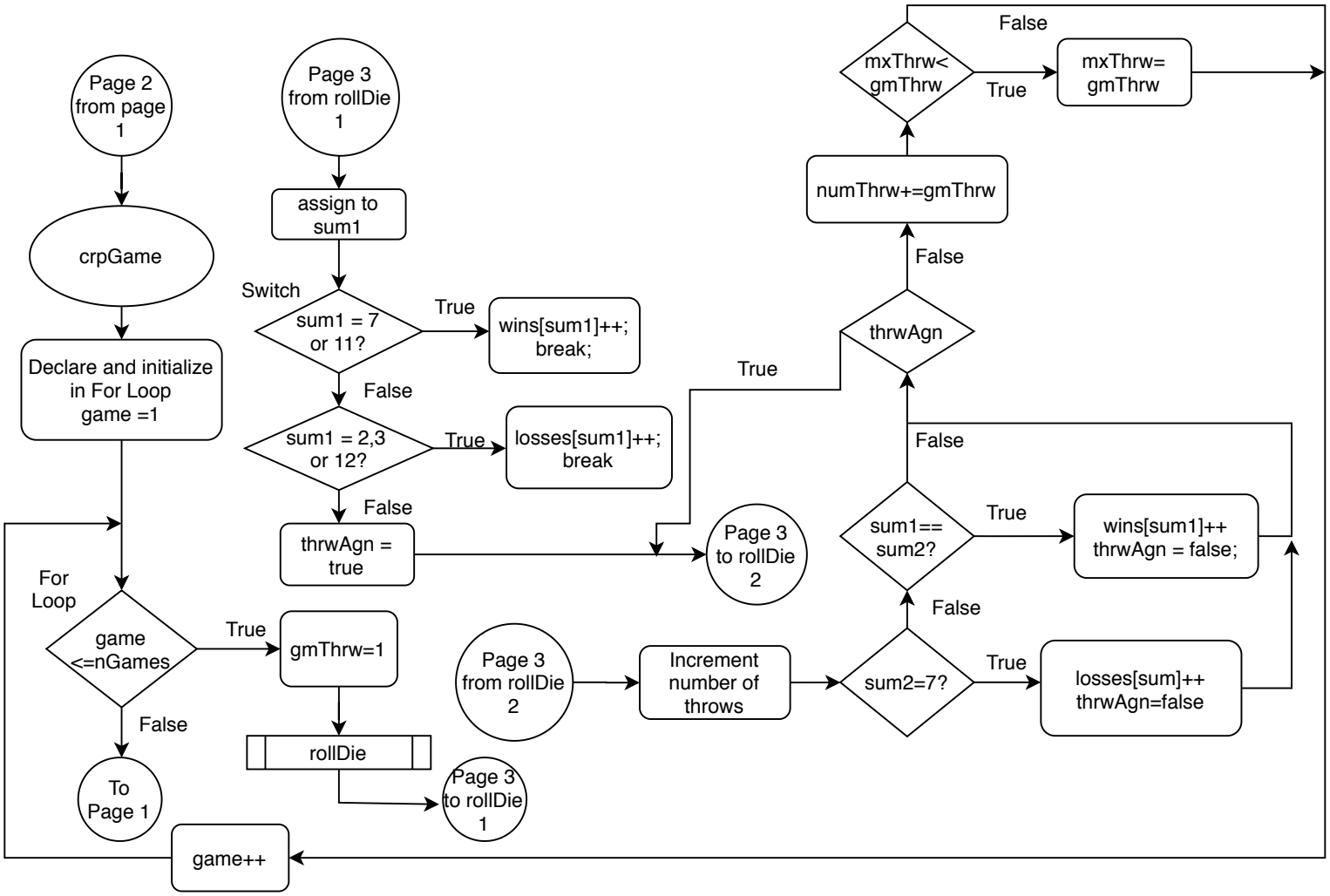
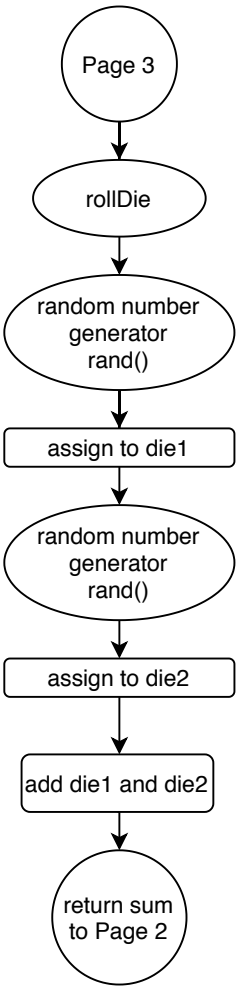
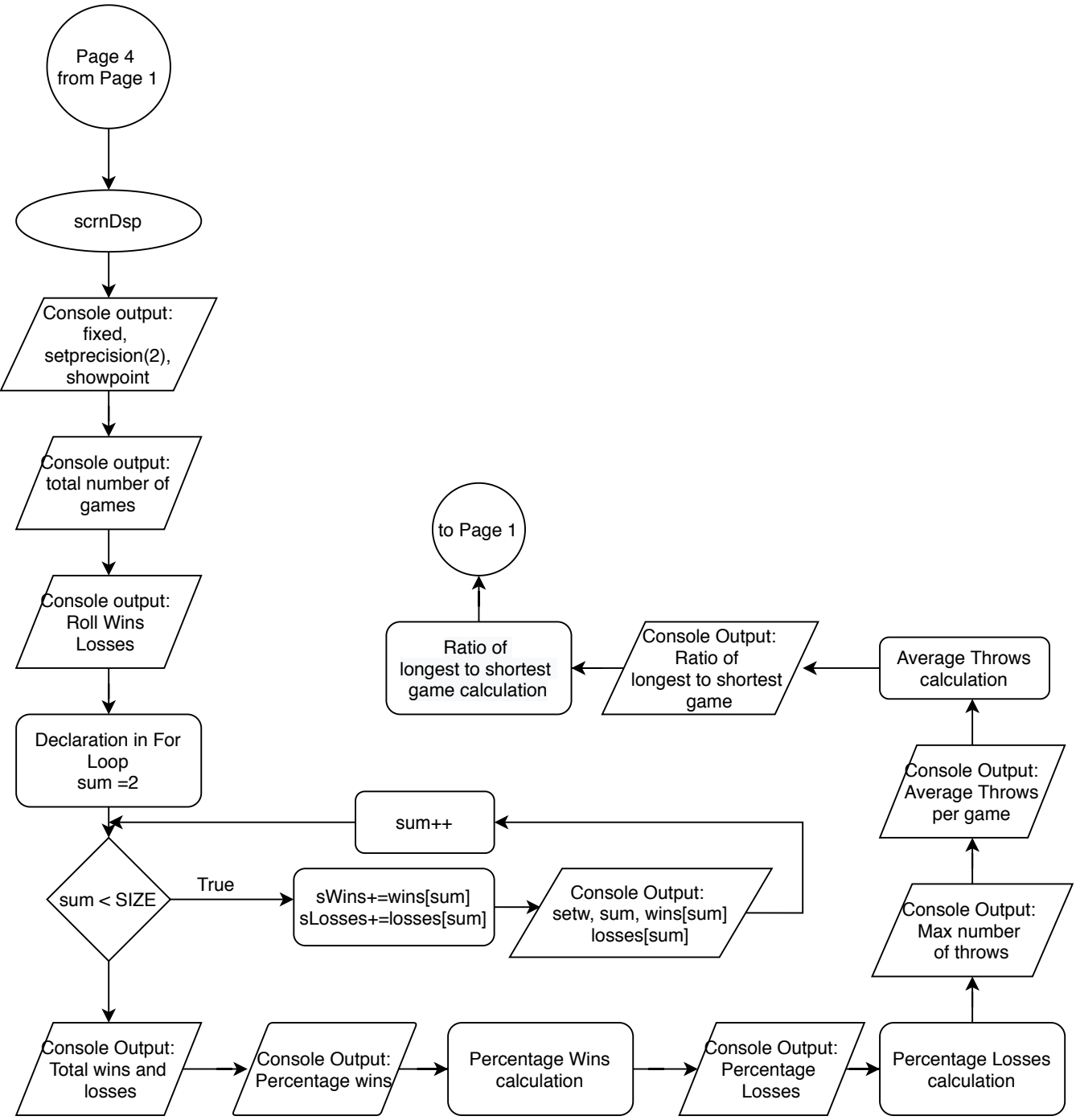
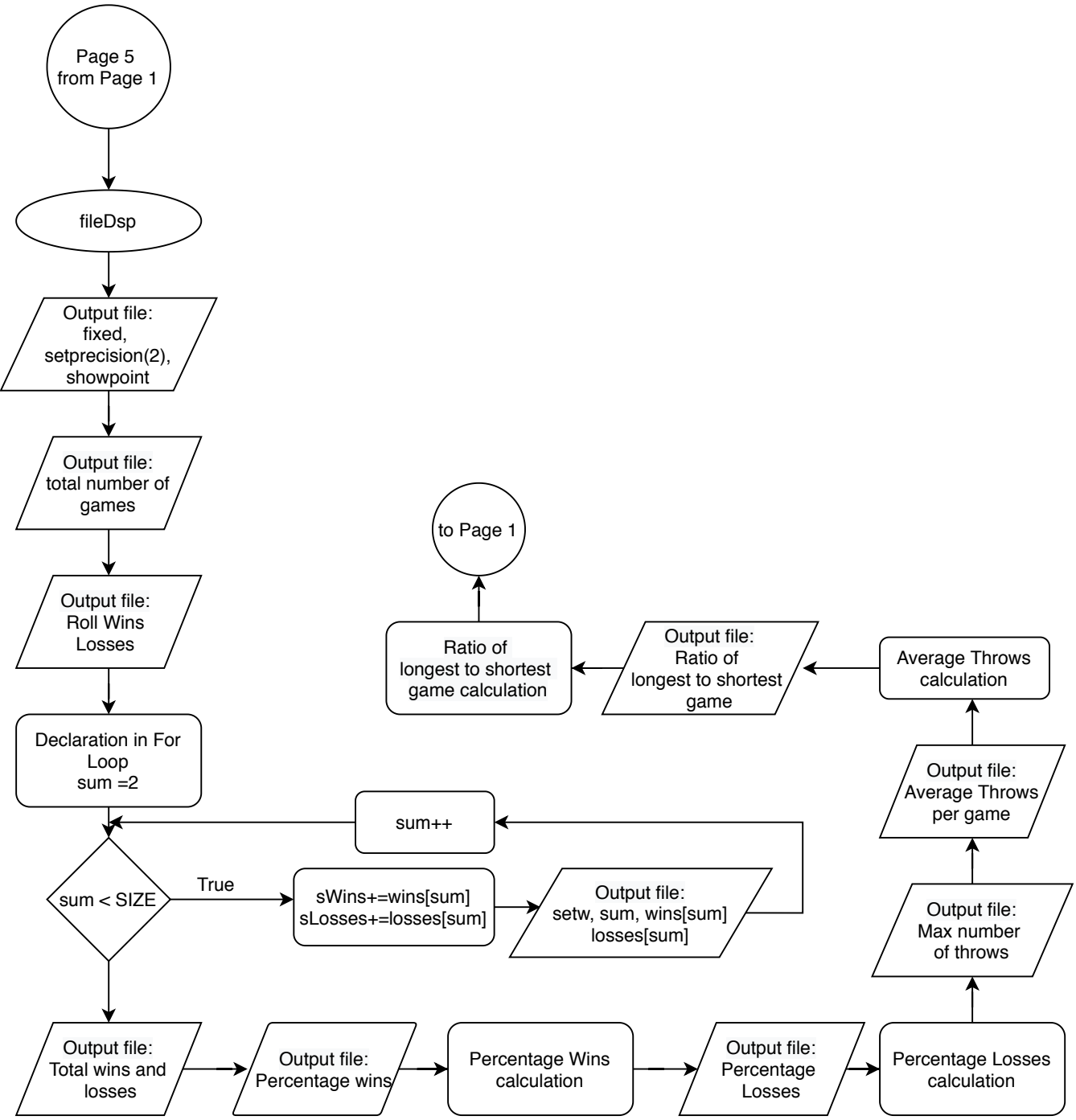

Author: Dr. Mark E. Lehr
Created on April 23rd, 2018, 11:42 AM
Purpose: Project 2 - Simulate a Craps Game.
Implement Arrays
System Libraries
I/O Objects
Time for Rand
Srand to set seed
File I/O
Format Output
Strings
Math functions
Standard namespace
User Libraries
None
Global Constants
const float PERCENT
Function Prototypes
char, Roll the Dice
void File Display
void Screen Display
void Play Craps
Main
srand()
Declare Variables
in
out
nGames, mxThrw, numThrw, lmGames
SIZE
wins[SIZE], losses[SIZE]
Initialize Variables
inName
outName
in.open(inName.c_str())
out.open(outName)
While loop
in>>nGames
True
nGames > lmGames
True
nGames = lmGames
False
nGames= nGames
False
Time the game play
crpGame
To Page 2
From Page 2
End time of Game Play
Output File: Total time in int sec
scrnDsp
To Page 4
From Page 4
ConsoleOut: Total time in int sec
fileDsp
To Page 5
From Page 5
Close files
return 0; exit main


Page 2 from page 1
crpGame
Declare and initialize in For Loop game =1
For Loop
game <=nGames
True
False
To Page 1
gmThrw=1
rollDie
Page 3 to rollDie 1
Page 3 from rollDie 1
assign to sum1
Switch
sum1 = 7 or 11?
True
wins[sum1]++; break;
False
sum1 = 2,3 or 12?
True
losses[sum1]++; break
False
thrwAgn = true
Page 3 to rollDie 2
Page 3 from rollDie 2
Increment number of throws
sum2=7?
True
losses[sum]++ thrwAgn=false
False
sum1== sum2?
True
wins[sum1]++ thrwAgn = false;
False
thrwAgn
True
False
numThrw+=gmThrw
mxThrw< gmThrw
True
mxThrw= gmThrw
False
game++


Page 3
rollDie
random number generator rand()
assign to die1
random number generator rand()
assign to die2
add die1 and die2
return sum to Page 2


Page 4
from Page 1
scrnDsp
Console output:
fixed,
setprecision(2),
showpoint
Console output:
total number of
games
Console output:
Roll Wins
Losses
Declaration in For
Loop
sum =2
sum < SIZE
True
sWins+=wins[sum]
sLosses+=losses[sum]
Console Output:
setw, sum, wins[sum]
losses[sum]
sum++
Console Output:
Total wins and
losses
Console Output:
Percentage wins
Percentage Wins
calculation
Console Output:
Percentage
Losses
Percentage Losses
calculation
Console Output:
Max number
of throws
Console Output:
Average Throws
per game
Average Throws
calculation
Console Output:
Ratio of
longest to shortest
game
Ratio of
longest to shortest
game calculation
to Page 1


Page 5
from Page 1
fileDsp
Output file:
fixed,
setprecision(2),
showpoint
Output file:
total number of
games
Output file:
Roll Wins
Losses
Declaration in For
Loop
sum =2
sum < SIZE
True
sWins+=wins[sum]
sLosses+=losses[sum]
Output file:
setw, sum, wins[sum]
losses[sum]
sum++
Output file:
Total wins and
losses
Output file:
Percentage wins
Percentage Wins
calculation
Output file:
Percentage
Losses
Percentage Losses
calculation
Output file:
Max number
of throws
Output file:
Average Throws
per game
Average Throws
calculation
Output file:
Ratio of
longest to shortest
game
Ratio of
longest to shortest
game calculation
to Page 1