while (iSelection < DROP\_SINGLE\_CHIP\_IN\_ONE\_SLOT || iSelection > QUIT\_PROGRAM) {

cout << "Invalid selection.Enter 3 to see options." << endl << endl;

cout << "Enter your selection now : ";

cin >> iSelection;

cout << endl;

}

while (iSelection == SHOW\_OPTIONS\_MENU || iSelection == QUIT\_PROGRAM) {

if (iSelection == QUIT\_PROGRAM) {

cout << "Goodbye!" << endl;

break;

}

else {

while (iSelection == SHOW\_OPTIONS\_MENU) {

cout << DROP\_SINGLE\_CHIP\_IN\_ONE\_SLOT << " - Drop a single chip into one slot" << endl;

cout << DROP\_MULTIPLE\_CHIPS\_IN\_ONE\_SLOT << " - Drop multiple chips into one slot" << endl;

cout << SHOW\_OPTIONS\_MENU << " - Show the options menu" << endl;

cout << QUIT\_PROGRAM << " - Quit the program" << endl;

cout << endl;

cout << "Enter your selection now : ";

cin >> iSelection;

cout << endl;

if (iSelection == DROP\_SINGLE\_CHIP\_IN\_ONE\_SLOT) {

cout << "\* \*\* Drop a single chip \*\*\*" << endl;

cout << endl;

cout << "Which slot do you want to drop the chip in(0 - 8) ?" << endl;

cin >> dSlot;

dCurrentPosition = dSlot;

//This loop handles invalid input

while (dSlot < 0 || dSlot > 8) {

cout << "Invalid slot.";

cout << endl;

cout << "Enter your selection now : ";

cin >> dSlot;

cout << endl;

}

//Simulate the chip drop

cout << "\*\*\* Dropping chip into slot " << dSlot << " \*\*\*" << endl;

cout << fixed;

cout << "Path: [" << setprecision(1) << dSlot << ", ";

for (int i = 0; i < NUMBER\_OF\_ROWS\_IN\_PLINKO; ++i) {

if (rand() % 2 == 1) {

dCurrentPosition = dCurrentPosition + 0.5;

if (i == NUMBER\_OF\_ROWS\_IN\_PLINKO - 1) {

cout << setprecision(1) << dCurrentPosition << "]" << endl;

}

else {

cout << setprecision(1) << dCurrentPosition << ", ";

}

}

else {

dCurrentPosition = dCurrentPosition - 0.5;

if (i == NUMBER\_OF\_ROWS\_IN\_PLINKO - 1) {

cout << setprecision(1) << dCurrentPosition << "]" << endl;

}

else {

cout << setprecision(1) << dCurrentPosition << ", ";

}

}

}

/\*

\*\*\* Dropping chip into slot 5 \*\*\*

Path: [5.0, 5.5, 5.0, 5.5, 5.0, 5.5, 6.0, 5.5, 5.0, 5.5, 6.0, 6.5, 6.0]

Winnings: $1000.00

\*/

}

}

}

}