Project 3

#include<iostream>

#include<iomanip>

#include<cstdlib>

#include<ctime>

using namespace std;

int main()

{

const long ROLLS=36000;

const int SIZE=13;

int expected[SIZE]={0,0,1,2,3,4,5,6,5,4,3,2,1};

int x;

int y;

int sum[SIZE]={};

srand(time(0));

for(long i=1;i<=ROLLS;i++)

{

x=1+rand() % 6;

y=1+rand() % 6;

sum[x+y]++;

}

cout<<setw(10)<<"Sum"<<setw(10)<<"Total"<<setw(10)<<"Expected"<<setw(10)<<"Actual\n"<<fixed<<showpoint;

for (int j=2;j<SIZE;j++)

cout<<setw(10)<<j<<setw(10)<<sum[j]<<setprecision(3)<<setw(9)<<100.0\*expected[j]/36<<"%"<<setprecision(3)

<<setw(9)<<100.0\*sum[j]/ROLLS<<"%\n";

system("pause");

}