

Week 4 Questions for Object Orientated Design & Implementation.

1. write a program which declares an array of 10 integers in the main() function, fills it with 10 randomly generated integers in the range 10-99 then passes this array to another function which returns the maximum value which is then printed out in main().
2. Modify your code such that the function calculates the max, min and average values and returns all three to main where they are printed out.
3. Write a program which declares a floating point variable (float) and accepts user input. Pass this number to a function which calculates the square root and makes it available for printing in Main().
4. Modify this code to do the following:
 1. in the function which calculates the square root, first check if the number is positive. if it is not, then print an error message. If it is, then execute the code developed in "3" above.
5. Write a program which simulates the roll of a die (singulare of dice). You should use random number generators to do this. Once you have this bit working, add to your code to conduct this experiment 1000 times and then find out:
 1. how many times an odd number cropped up?
 2. how many times a 6 cropped up?
 3. how many times a number less-than or equal to 2 cropped up.

Are the results in line with the probabilities you would expect? (hint: you'll have to use some of your stats knowledge to answer that last one)