

Design Practice with Loops

Introduction:

For each of the following questions design a flowchart that will solve problem. Once design is complete, attempt to program each of your designs EXACTLY as you designed them. Assess if they worked with programmed, note down any problems you came across to remind you for future design tasks.

Questions:

1. Create a flowchart for a calculator that has the following options, the ability to enter a number, add, subtract, divide, multiply, square root, exit and clear. The program should continue to work until the user chooses the exit option.
2. Create a flowchart that asks the user to enter one of 5 choices:
 - a. Forward (w)
 - b. Backward (s)
 - c. Left (a)
 - d. Right (d)
 - e. Exit (x)

The program should continue to ask the user for input until they enter "x" for exit. It will then output how many times each of the 4 directions was chosen.

3. (Advanced – Not required for homework)
Create a flowchart for one person's turn in a game of Yahtzee. If you do not know how to play Yahtzee go here: <http://www.howtodothings.com/hobbies/a2056-how-to-play-yahtzee.html>