

## Program Design Week 4

### Problem #1

1. Start Program
2. Set counter to zero
3. Ask for grades and store
4. Add 1 to counter
5. If counter is greater than a 100, add all the grades together and divide by the counter, display answer, end program.
6. If grades less than 100 then loop back to step 3 and repeat

### Problem #2

1. Start program
2. Generate a random number from 1-50
3. Set counter "lives" to 5
4. Print "What is your Name"
5. Store Inputed name in variable "name"
6. Check if lives are greater than zero if so continue with program, if not greater than zero end display end message and restart program if asked
7. Print "Guess a number between 1-50"
8. Check if inputed "guess" is equal to random number
9. If so then print "Congragulations <Name Variable>"
10. If it is not equal then subtract one life from coutner and loop back to step 5

### Problem #3

1. Start program
2. Set lives to 0
3. Set score to 0
4. If life is less than zero then print game over and then print the score variable
5. If life is greater than zero then continue with program
6. Pick a random number between 1-50 and assign it's a variable Num1
7. Pick a random number between 1-50 and assign it's a variable Num2
8. Print <num1> x <num> 2 = ?
9. Record input
10. If input is not equal to Num1\*Num2 then subtract 1 from life variable and head back to step 4
11. If input is equal to Num1\*Num2 then print correct and add 1 to score variable
12. Then head back to step 4

