

## Coding Challenge #1

### Insert Node into Linked List

Write a function to **insert a node** in a singly-linked list at a given point in the linked list. The function should take in two inputs: the value of the node and the position where the node will be inserted. The position will be a 1-based index meaning that the position of the head node will be 1. The position will never be the beginning (the head) or the end (the tail) of the list.

List: 1 -> 5 -> 10 -> 3 -> 6

Input: insert(2,4)

Output: 1 -> 5 -> 10 -> 2 -> 3 -> 6

List: 1 -> 5 -> 10 -> 3 -> 6

Input: insert(3,2)

Output: 1 -> 3 -> 5 -> 10 -> 3 -> 6

List: 1 -> 5 -> 10 -> 3 -> 6

Input: insert(9,3)

Output: 1 -> 5 -> 9 -> 10 -> 3 -> 6

## Coding Challenge #2

### Create a Gradebook System

Write a program which will ask the user to input a certain number of students. Then, ask the user how many tests were administered to the students.

For each student, ask the user to input the first name of the student, the last name of the student, and each numerical grade of the tests for the student.

For each student, calculate the grade average (sum of all test scores / number of tests) and a letter grade based on the following table.

Numerical Grade	Letter Grade
90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

Create a class that holds all the student's information and any methods needed.

Then output each student's first and last name, grade average, and letter grade to the user.