Write the following Matlab code:

1. Write a program which graphs the formula $y=(x+2)^3+x$ where $x$ varies from $-10$ to $10$.
2. The Fibonacci numbers are the values $0, 1, 1, 2, 3, 5$ etc. where each successive number is the sum of the two values preceding it. Write a function called “Fib” which takes a single positive integer $N$ and returns the $N^{th}$ Fibonacci number. ($Fib(0)=0, Fib(1)=1, Fib(2)=1, Fib(3)=2$ etc.) Supply a main program uses the Fib() function to graph the first $20$ Fibonacci numbers vs. their rank. See [http://en.wikipedia.org/wiki/Fibonacci_number](http://en.wikipedia.org/wiki/Fibonacci_number) for more details on Fibonacci numbers.
3. Write a function named “noNegOne” which takes a row vector as an argument and returns a “1” if the vector has no negative numbers in it and a “0” if it does have one or more negative number. The row vector can be of any size. Supply a main which calls it twice, once with a vector that has negative numbers, and once without negative numbers.