Homework 6

Due 15 April, 1985

Write a Pascal "abstract" data type for LOGO lists of integers. That is, define an appropriate data structure to represent LOGO lists and then write Pascal fuctions for the operations `FPUT` (`CONS`), `FIRST`, `BUTFIRST`, and `EMPTYP`. You will also need to write a Pascal function that transforms an integer into an one integer list.

You need not actually type in your program and test it, but be careful about bugs if you don't.

Consider the following expression:

```
not A - B > C and (D < E or F) or not G and H = J
```

Using the hierachy rules of both Ada and Pascal, translate the expression into tree form and then into postfix notation. Make up suitable boolean values for its variables and show how Pascal evaluates the expression on its stack.