CS/Math 278
Lab5
Due on Wednesday Oct 7 at 5:00 PM

Write a program that does the following.
It prompts the user to input ten integers with no repeated values. Let D be the set of integers entered by the user. The integers are stored in an integer array of size ten.
The program evaluates which of the following statements are true and which are false with respect to the domain D.

Statements:

a) $\forall x \in D$, if x is odd then $x>0$.
b) $\exists x \in D$, if x is odd then $x>10$.
c) $\forall x \in D$, either x is divisible by 2 or x is divisible by 3.
d) $\forall\ x, y \in D$, $x<y$ or $y<2x$.
e) $\exists x, y, z \in D$, $x^2 + y^2 = z^2$.

For each statement the program outputs the statement label and its truth value.

Dialog with the user may look like the following:

Please enter 10 integers: -2 3 6 -12 8 4 5 7 1 14

a) True
b) True
c) False
d) False
e) True