6. A prime number is only divisible by one and itself. The first five prime numbers are shown below:

2, 3, 5, 7, 11, . . .

The code below checks if a number is prime.

```
Line 1    FUNCTION checkPrime(INTEGER n) RETURNS BOOLEAN
Line 2        DECLARE validPrime INITIALLY TRUE
Line 3        IF n < 2 THEN
Line 4            SET validPrime TO FALSE
Line 5        ELSE
Line 6            FOR divisor FROM 2 TO (n-1) DO
Line 7                IF <the remainder of n divided by divisor is
                          equal to 0> THEN
Line 8                    SET validPrime TO FALSE
Line 9                END IF
Line 10           END FOR
Line 11       RETURN validPrime
Line 12   END FUNCTION
...
Line 42   DECLARE inputNum AS INTEGER INITIALLY FROM KEYBOARD
Line 43   <set isPrime by calling the function checkPrime to
          identify if inputNum is prime or not>
Line 44   IF isPrime = TRUE THEN
Line 45       SEND inputNum & " is prime." TO DISPLAY
Line 46   ELSE
Line 47       SEND inputNum & " is not prime." TO DISPLAY
Line 48   END IF
```

(a) Using a programming language of your choice, write the code for line 7. **2**

(b) Using a programming language of your choice, write the code for line 43. **2**