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import java.util.Scanner;
public class Main {
    private static int valueAssignment(char hexInput) {
        int hexValue = 0;

        if (hexInput == '0') {
            hexValue = 0;
        }
        if (hexInput == '1') {
            hexValue = 1;
        }
        if (hexInput == '2') {
            hexValue = 2;
        }
        if (hexInput == '3') {
            hexValue = 3;
        }
        if (hexInput == '4') {
            hexValue = 4;
        }
        if (hexInput == '5') {
            hexValue = 5;
        }
        if (hexInput == '6') {
            hexValue = 6;
        }
        if (hexInput == '7') {
            hexValue = 7;
        }
        if (hexInput == '8') {
            hexValue = 8;
        }
        if (hexInput == '9') {
            hexValue = 9;
        }
        if (hexInput == 'A' || hexInput == 'a') {
            hexValue = 10;
        }
        if (hexInput == 'B' || hexInput == 'b') {
            hexValue = 11;
        }
        if (hexInput == 'C' || hexInput == 'c') {
            hexValue = 12;
        }
        if (hexInput == 'D' || hexInput == 'd') {
            hexValue = 13;
        }
        if (hexInput == 'E' || hexInput == 'e') {
            hexValue = 14;
        }
    }
}
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    }
    if (hexInput == 'F' || hexInput == 'f') {
        hexValue = 15;
    }
    if (hexInput == 'X' || hexInput == 'x') {
        hexValue = 0;
    }
    return hexValue;
}
public static void main (String args[]){
    Scanner scnr = new Scanner(System.in);

    System.out.print("Enter a hexadecimal number: ");
    String hexInput = scnr.next();//what the user inputs

    long decimalTotal = 0;
    int hexInputLength = hexInput.length();

    int hexCalc;
    int index = hexInputLength - 1;
    /*allows us to subtract from hexInputLength while still
keeping hexInputLength a constant
which we'll need to use in the while loop*/

    while (index >= 0) {
        hexCalc = valueAssignment(hexInput.charAt(index));//
gets the leftmost character and assigns it a value
        decimalTotal = decimalTotal + Math.abs(hexCalc *
(long) Math.pow(16, hexInputLength - index - 1));
        //not part of final code I'm using this to see where
the program is going wrong
        index--;
    }

    System.out.println("Your number is " + decimalTotal + " in
decimal");
    System.out.println();
}
}

```