Untitled-1

```
//3
/*
 * isAsciiDigit - return 1 if 0x30 <= x <= 0x39 (ASCII codes for characters '0' to '9')
 *   Example: isAsciiDigit(0x35) = 1.
 *            isAsciiDigit(0x3a) = 0.
 *            isAsciiDigit(0x05) = 0.
 *   Legal ops: ! ~ & ^ | + << >>
 *   Max ops: 15
 *   Rating: 3
 */
int isAsciiDigit(int x) {
  int lower_bound = 0x30;
  int upper_bound = 0x3a;

  int diff1 = x + (~lower_bound + 1);  // x - lower_bound
  int diff2 = upper_bound + (~x);  // upper_bound - x

  int sign1 = diff1 >> 31 & 1;  // 1 if diff1 < 0, 0 otherwise
  int sign2 = diff2 >> 31 & 1;  // 1 if diff2 < 0, 0 otherwise

  return !(sign1 | sign2);  // return 1 if neither sign1 nor sign2 is 1, 0 otherwise
}
```