Tutorial 1: C Programming Review

Question 1: Write down the output of the following C program.

```c
#include <stdio.h>

int main() {
    int x[] = {2, 4, 6, 8, 10}, y = 3, *z;

    z = &y;
    *z = 2;
    x[y] = 3;

    z = x;
    ++(*z);
    ++z;
    *z = 2(*z);

    printf("%d %d %d %d %d %d\n",
        x[0], x[1], x[2], x[3], x[4], y, *z);
    return 0;
}
```
Question 2: Complete one-line C codes for the bit operations described below.

```c
int x = 3076;

/* set all bits to 0 */
x = ___________________________________________________________________________

/* keep least significant bit (1st bit), all others set to 0 */
x = ___________________________________________________________________________

/* toggle l.s.b (1st bit), all other bits unchanged */
x = ___________________________________________________________________________

/* set l.s.b. (1st bit) to 1, all others toggle */
x = ___________________________________________________________________________

/* set 2nd and 12th bits to 1, 5th and 9th bits to 0, others unchanged */
x = ___________________________________________________________________________
```