```
/* Questo programma determina se un valore è un multiplo di X */

#include <stdio.h>

int multiple(int);

main()
{
    int y;

    printf("Enter an integer between 1 and 32000: ");
    scanf("%d", &y);

    if (multiple(y))
        printf("%d is a multiple of X\n", y);
    else
        printf("%d is not a multiple of X\n", y);

    return 0;
}

int multiple(int num)
{
    int i, mask = 1, mult = 1;

    for (i = 1; i <= 10; i++, mask <<= 1)
        if ((num & mask) != 0) {
            mult = 0;
            break;
        }

    return mult;
}
```

10.20 Che cosa farà il programma seguente?

```
#include <stdio.h>

int mystery(unsigned);

main()
{
    unsigned x;

    printf("Enter an integer: ");
    scanf("%u", &x);
    printf("The result is %d\n", mystery(x));
    return 0;
}

int mystery(unsigned bits)
{
    unsigned i, mask = 1 << 15, total = 0;

    for (i = 1; i <= 16; i++, bits <<= 1)
        if ((bits & mask) == mask)
            ++total;

    return total % 2 == 0 ? 1 : 0;;
}
```