1.

1. x = %esi, n = %ebx, result = %eax, mask = %edx
2. Result = 0 , mask = 1
3. mask != 0
4. Mask gets updated by being shifted left by n bits.
5. Result gets updated by having a bitwise and done on x
6. Int loop(int x, int n)

{

int result = -1

int mask;

For (mask = 1; mask != 0; mask << n) {

result ^= mask & x

}

return result;

}

2.

int switch3(int \*pi, jilt \*p2, mode\_t action) {

tnt result = 0;

switch(action) {

case MODE\_A:

result = \*p1;

p1 = p2;

return result;

case MODE\_B:

result = \*p2

p2 = p1;

return result;

case MODE\_C:

\*p1 = 15;

result = p1;

return result;

case MODE\_D:

\*p2 = p1;

result = 17;

return result;

case MODE\_E:

result = 17;

return result;

default:

}

return result;

}

3.

A. M = 52

B. i = %edx, j = %eax

C. ?

4.

A. They are the words in the string.

B. They are integers which are used throughout the program, when operators are used on strings, the strings are converted to integers before the operation.

C. It is handled as words. Functions are passed something that is split into words.

D. Return a pointer to the location in memory.