This daily will allow you to practice more with the bit wise operators and shifts. Consider the following main program:

```
#include <stdio.h>
void set_flag(int* flag_holder, int flag_position);
int check flag(int flag holder, int flag position);
int main(int argc, char* argv[])
      int flag_holder = 0;
      int i;
      set_flag(&flag_holder, 3);
      set_flag(&flag_holder, 16);
      set_flag(&flag_holder, 31);
      for(i=31; i>=0; i--)
             printf("%d", check_flag(flag_holder, i));
             if(i\%4 == 0)
                    printf(" ");
      printf("\n");
      return 0;
}
```

Write the code for the definition of set_flag and check_flag so that the output of your program looks like the following:



You can think of the set_flag function as taking an integer and making sure that the n^{th} bit is a 1. The check_flag function simply returns an integer that is zero when the n^{th} bit is zero and 1 when it is 1. You may find the shifting

operators "<<", and ">>" helpful as well as the bitwise operations & and |. If you find yourself using multiplication or division in your solution then you are doing it wrong.

At the top of your code you should have a comment section that has the following format:

Author: <your name>
Date: <Today's date>

Effort: <Time you spent on this project>