

```
1  #include <stdio.h>
2
3  int main(void)
4  {
5      //function prototypes
6      void PrintBinaryFormOfNumber(unsigned int);
7
8      //variable declarations
9      unsigned int a;
10     unsigned int num_bits;
11     unsigned int result;
12
13     //code
14     printf("\n\n");
15     printf("Enter An Integer = ");
16     scanf("%u", &a);
17
18     printf("\n\n");
19     printf("By How Many Bits Do You Want To Shift A = %d To The Right ? ", a);
20     scanf("%u", &num_bits);
21
22     printf("\n\n\n");
23     result = a >> num_bits;
24     printf("Bitwise RIGHT-SHIFTing A = %d By %d Bits \nGives The Result = %d      ↗
25           (Decimal).\n\n", a, num_bits, result);
26     PrintBinaryFormOfNumber(a);
27     PrintBinaryFormOfNumber(result);
28
29     return(0);
30 }
31
32 // ***** BEGINNERS TO C PROGRAMMING LANGUAGE : PLEASE IGNORE THE CODE OF THE      ↗
33 //           FOLLOWING FUNCTION SNIPPET 'PrintBinaryFormOfNumber()' *****
34 // ***** YOU MAY COME BACK TO THIS CODE AND WILL UNDERSTAND IT MUCH BETTER AFTER  ↗
35 //           YOU HAVE COVERED : ARRAYS, LOOPS AND FUNCTIONS *****
36 // ***** THE ONLY OBJECTIVE OF WRITING THIS FUNCTION WAS TO OBTAIN THE BINARY    ↗
37 //           REPRESENTATION OF DECIMAL INTEGERS SO THAT BIT-WISE AND-ing, OR-ing, COMPLEMENT ↗
38 //           AND BIT-SHIFTING COULD BE UNDERSTOOD WITH GREAT EASE *****
39
40 void PrintBinaryFormOfNumber(unsigned int decimal_number)
41 {
42     //variable declarations
43     unsigned int quotient, remainder;
44     unsigned int num;
45     unsigned int binary_array[8];
46     int i;
47
48     //code
49     for (i = 0; i < 8; i++)
50         binary_array[i] = 0;
```

```
48     printf("The Binary Form Of The Decimal Integer %d Is\t=\t", decimal_number);
49     num = decimal_number;
50     i = 7;
51     while (num != 0)
52     {
53         quotient = num / 2;
54         remainder = num % 2;
55         binary_array[i] = remainder;
56         num = quotient;
57         i--;
58     }
59
60     for (i = 0; i < 8; i++)
61         printf("%u", binary_array[i]);
62
63     printf("\n\n");
64 }
65
```