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|  | C Program to print number to set of bits  #include <stdio.h> |
|  | unsigned int countSetBitsUtil(unsigned int x); |
|  | unsigned int countSetBits(unsigned int n) |
|  | { |
|  | int bitCount = 0; |
|  |  |
|  | for (int i = 1; i <= n; i++) |
|  | bitCount += countSetBitsUtil(i); |
|  |  |
|  | return bitCount; |
|  | } |
|  | unsigned int countSetBitsUtil(unsigned int x) |
|  | { |
|  | if (x <= 0) |
|  | return 0; |
|  | return (x % 2 == 0 ? 0 : 1) + countSetBitsUtil(x / 2); |
|  | } |
|  | int main() |
|  | { |
|  | int n,i; |
|  | scanf("%d",&n); |
|  | printf("%d\n",countSetBits(n)); |
|  |  |
|  | return 0; |
|  | } |